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ANTHROPOLOGY AND THE GOVERNMENT OF NATIVE RACES IN THE PACIFIC.¹

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ANTHROPOLOGY has been defined as the science of man, considered physically, intellectually and morally, or in his entire nature. As a science dealing with man, the supreme product of nature, it demands tribute from every other branch of science. The scope of this paper is fortunately defined by the relation of the science to the government of native races in the Pacific. Briefly the writer is required to discuss the impact of imported cultures under control of civilized governments on pre-existing native polity; and further, it is presumed, to indicate the method whereby the native mind may be influenced to surrender its concepts and to accept the new ideas. It is not possible to cover the question adequately in the time available this evening, but an attempt will be made to deal with the main factors in the problem.

This paper will be found deficient in those abstract statements and generalizations, that characterize scientific discussions, and to that extent will, it is feared, fall short of the standard of a group interested in psychology and philosophy. The writer, as a Polynesian, accepts without reservation the dictum of students of Maori mentality, that the race had not attained to such a command of ideas and of the language to express them as to have been able to use abstractions and generalizations. Maori literature, such as it is, is characterized, particularly in its poetry, by allusiveness, by its abundant use of concrete illustrations, whence the student may deduce principles and beliefs, and place them in his schemes of classification. The student of the *whakatauki*, or proverbial sayings of the Maori, will note their poverty in those abstractions which distinguish the wise sayings of the Hebrew, the European, or the Hindu. The Maori language abounds in metaphorical expressions; old narratives teem with aphorisms and personifications. The

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Maori orator delights in allegory. Mr. Elsdon Best has emphasized the mytho-poetic imagery so characteristic of Maori mentality, but deplored the paucity of terms denoting abstractions. It would be well to bear this in mind, when appraising the appeal of European principles, beliefs and standards to the Maori or Polynesian mind and heart; it has too often failed to reach the mark, because of its unfamiliar and foreign apparel.

There is a tendency perhaps in modern science to magnify the importance of terminology; a tendency in ethnographers to work to skeleton charts, such as are outlined in "Notes and Queries on Anthropology," and to measure the quality of their work by the detailed filling of those charts. Much superficial work has been done under this guise. The temptation to make the material observed conform to the principles connoted by the terminology of the charts could not always be resisted. Races under observation are thus often credited with mental and other qualities they never possessed; or more is read into their culture and sociology than the facts warrant. This strain of superficiality is perhaps more apparent in studies of sub-tropical peoples, where isolation, climate and insufficient communications make the research student impatient of his environment and inclined to rush his "job" to a conclusion. He does not succeed in tuning in to the mentality of the people he has come to study before passing on to other localities, whose survey is planned in the research scheme.

As great a source of inaccuracy and misunderstanding is the mental and, it should be added, the social attitude of the observer. To be thoroughly scientific he must be honest and completely receptive; must not allow preconceived notions to undervalue or overestimate any fact or concept, that may come into view in his observations. The early missionaries were not good observers of the mythology and religious beliefs of the Polynesians. They were prone to measure these by biblical standards or to apply to them a terminology liable to be misunderstood. Shortland in "Traditions and Superstitions of the New Zealanders," speaking of the missionaries, said:

"The missionaries, who from their knowledge of the language, alone had it in their power for many years to converse freely with the native race, seem to have avoided all enquiries on such subjects. They came to teach a religion, and not to learn the principle of superstitions, which, however valuable in matters of ethnological interest, they regarded as having for their author the great enemy of mankind.

"Similar views have probably influenced missionaries in all new countries, for precisely the same course was taken by the early Spanish missionaries at the Philippine Islands, who, we are told, did their utmost 'to extirpate the original memorials of the Natives,' substituting religious compositions of their own, in the hope of supplanting the remains of national and pagan antiquity."

It is said that Maori matter recorded about the middle of last century was not above suspicion, that either the *tohungas* dictating the same, or the scribes who took their notes and extended them, were influenced by the scriptures. The best studies of the moral and religious beliefs of the Maori have been made by men who were not interested in supplanting or converting them to other beliefs; while the best results have been obtained by missionaries, who have accepted the Maori philosophical system as the product of an adult, intellectual, and spiritual nature, and thus entitled to respect, to be put aside by the aboriginal people in view of something better, more satisfying or less irksome than their former regime.

As prone to err as the early missionaries, were the *pakeha* immigrants, who adopted a pose of superiority, an air of self-sufficiency, that refused to learn aught from a barbarous people or to brook anything but the imposition of their transplanted culture on the barbarians whom they found in prior occupation. Your Association will, I take it, condemn such an attitude as roundly as did the Natives, illustrating as it does your wise saying relative to the blindness of those, who having the capacity to see, will not use that faculty. It should be granted, however, that if the mission of the immigrant culture is complete conquest and destruction, then calculated blindness is the best policy. The aboriginal inhabitants would rank with the indigenous forest and fern, as so many obstructions for the energetic pioneer to remove and replace with imported grasses, and an imported population with its concomitant culture complex. There is no doubt, that most of the errors and misunderstandings have arisen from the intolerance, the narrowness, the prejudice and intellectual contempt evinced by the European in contact with native races, whether it be in Polynesia or anywhere else. Such an attitude has too often evoked a corresponding resistance and repugnance, a clash, if it may be so termed, of cultures, the lower being overborne, it is true, together with the people, whose inheritance it was from the ages.

It was not to be expected that in the settlement of New Zealand by the white race there would be, as a preliminary,

an ordered and organized study of Maori culture. Colonization, especially of the North Island, was not a deliberate act of a government or of an organization, such as was created in the New Zealand Company or those organizations which settled Canterbury and Otago. An intensive study of the history of the Bay of Islands at the beginning of the nineteenth century by the ethnologist would make an immensely valuable contribution to the problem, which is denoted by the title of this paper. It would be a study of the play of human motives; of the mind of the Maori, actuated by the same motives as have actuated man in all lands and in all ages, now faced with new methods and strange means of satisfying ancient aims and desires; of the mind of the *pakeha* trader and adventurer, be he whaler, flax-merchant, or sailor, breaking new ground indeed for the exercise of his superior knowledge, but repeating a familiar experience—the experience of his forbears in Africa, the Indies, and America; of the mind of the missionary, representing at that time the best elements in the immigrant culture. This mind, however much it was confined and handicapped by the nature of its mission, did seek to probe that of the Native, and did attempt to appraise and register the aboriginal institutions, the social psychology of the Maori people. The “Williams” family, than which no other was more successful in influencing the Maori mind, has left us no connected or extended study of Maori culture at this time. The mastery of the Maori language, evidenced by the successive editions of the Maori dictionary by three generations of the family, is sufficient proof that the necessary talent and knowledge were not wanting. Those who had the privilege of knowing the members of the family of the past generations and many of its representatives to-day can vouch for their intimate knowledge of Maori character and mentality, their great judgment in weighing facts and ideas. It is to be regretted, therefore, that this unique talent has not preserved to us a balanced statement of the factors in the meeting of cultures at the Bay of Islands a century ago.

The missionaries saw the introduction of the most formidable and the most seductively attractive elements of modern civilization, fire-arms, alcohol, and trade. The introduction of the first-named took place at that stage in the history of the Maori people, when all over the North Island tribe warred with tribe and bloody struggles were taking place, which, if civilization, though attended by much evil, had not entered, might have ended in the depopulation of the country. Tribal histories, both published and unwritten, agree that in the third or fourth generation after the *Arawa*-

Tainui migration from Eastern Polynesia tribal wars on an extensive scale commenced. Vendettas and reasons therefor accumulated through the generations, until towards the end of the eighteenth century tribal warfare had reached a summit of fury and savagery unparalleled anywhere in the Pacific.

The research student will find ample and highly interesting material in pursuing the effect of the introduction of fire-arms on Native culture. Hongi Hika of infamous memory merely anticipated, what many another war leader might have done, if the whaler and trader had found harbours in other localities as favourable as Whangaroa and the Bay of Islands. The *pu-tawhiti* would have been used as readily and as relentlessly to wipe out old scores. The immigrant culture required, that in regard to its sea-faring vessels they should have ample sheltered anchorage in deep waters, close to provisions, water, and suitable timber, where they might be refitted for further voyages. Contemporary Maori songs abound with references to the new and terrible implement of warfare, which in two generations completely relegated the old weapons to the ceremonial *marae* or the museum. Prescott has related, in a masterly manner, the devastating effects of the Spanish warfare on the ancient civilizations of Mexico and Peru. New Zealand awaits another Prescott to describe in appropriate language the most dramatic effects of the introduction of this element of the culture of Europe.

The historian or ethnologist may contemplate the disintegrating effects of these importations. It would not be possible or necessary to detail them here. But no study would avail which did not emphasize the violence which the three imported factors did to pre-existing Native polity. In warfare, it is true, the method of destruction was merely changed and the scale probably increased, though the latter may be doubted. The most serious result, probably was that the possession of fire-arms became the overwhelming motive of the Native mind; his industrial activities were ordered to that end; his control of tribal lands was governed by a new and supreme temptation, so that the new culture appealed to his avarice and desire for vengeance and power.

The gun, alcohol, manufactured clothes and blankets, barter, money, traffic in land—the anthropologist must not neglect to record in the pursuit of his science the part each of these has played in the disintegration of Native cultures in Polynesia, as in other parts of the world.

From this welter of lust and bloodshed the Maori people emerged with terrible scars and unbalanced minds. It should be emphasized that culturally the severest loss was that of the old time sanctions, which fortified custom and their

religious system, which supported the *mana* and prestige of the chiefs and priests, round which the communal system evolved. It was at this period that the far-off British Government decided to intervene, and to introduce law and order in a country, where its white subjects had established themselves and required, not only protection, but control in their relations with the aboriginal inhabitants. That remarkable document, the Treaty of Waitangi, was signed nearly two generations after the first serious impact of *pakeha* civilization upon the Maori regime. The student of anthropology will find ample room for speculation as to the mental attitude of the chiefs assembled at Waitangi in February of 1840, and especially as to their conception of the meaning of the terms, "sovereignty," *mana*, "ownership according to Native customs and usages," as Governor Hobson, through Henry Williams, expounded them. Would the Maori tribes have been welded by warfare into a race under a supreme chief and thus evolved, as in some of the Pacific Islands, the institution of Kingship? It is extremely doubtful. The size of the country, the difficulties of transport and the relationships of leading *rangatira* families would have militated against any permanent effective cohesion.

Jurists in successive generations have written tomes to expound the conception of sovereignty. Even now the abstraction is not easy to grasp and comprehend. Fortunately, for the Maori, in New Zealand the British genius had personified abstract sovereignty in the distant King, whom some of the Maori Chiefs had seen in the flesh, with whose successor they or their descendants concluded the Treaty. The nearest approach to an appreciation of the nature and effect of the Treaty was expressed by old Nopera Pana-Kareao, the most powerful chief in the Mangonui and Kaitaia districts, in a speech accounted amongst the finest examples extant of old-time Native oratory:

I wish you all to love the Governor. We are saved by this. Let everyone say, "Yes," as I do. We have now some one to look up to. My grandfather brought the *Pakehas* to this very spot, and the chiefs agreed with what my grandfather did. He went on board the ship and got trade. He spread it through the land. Let us act right as my ancestors did. What has the Governor done wrong? *The shadow of the land goes to the Queen, but the substance remains with us. We will go to the Governor and get payment for our land as before.*

I have lingered at some length over this famous compact, because of its bearing on the government of the Maoris in this country. We have come to the point where the anthropologist becomes the historian, the jurist, and, in a measure, the psychologist. The attitude of the Maori mind towards

the new conceptions of sovereignty, personified by the Queen, Government, as embodied in the Governor and his officials, the ownership of land according to custom and usage as guaranteed by the Treaty, and, finally, towards the abstract idea of legal equality with the representatives of the new culture, is a subject well worth the attention of the ethnologist who sees before his own eyes the actual process of the merging of cultures, the adaptation of one to the pressure of elements in the other, the reaction of the lower upon the higher, and withal the physical, mental, and moral influences generated in the process. In no other land have the circumstances been so favourable for the study. Under no other rule has it been possible to stage such a drama as has been unfolded in New Zealand—the deliberate lifting of a people of lower culture to full equality in political, social, and moral communion with one of the most advanced races in the world.

In every department of material culture the Maori primitive polity could parallel, though on a lower plane, corresponding elements in the new culture. So could every other important branch of the Polynesian race. And in one department or another the new culture met stubborn, conservative elements, that are not yet completely dissolved. I maintain that the function of Government in this country, as applied to the Maori race, has been to discover and appraise these elements, and especially to judge whether in their nature they were detrimental to progress on the lines newly laid down, or worth preserving in a modified form. It is in the disposition shown by legislators, educationists, reformers, churchmen, and all who have had to do with the administration of Maori affairs, to examine sympathetically these elements in the Native culture and to provide for them so that New Zealand may be regarded as the best example of success in the government of a Native race not only in the Pacific, but perhaps in the world.

I wish to refer briefly to some examples to illustrate my contention. In regard to the physical preservation and improvement of the Maori people, reform met with strong and persistent resistance. The disturbance was not apparent in the physical culture of the race. Those of you who have read the observations of Taylor, Thomson, Colenso, Elsdon Best, and others on the manners and customs of the Maori will appreciate that in the economy of their village life, in their customs relating to the treatment of the sick, to the care of children, to their food and clothing, to housing and living conditions, to the disposal of the dead, and to the all-pervading *tapu*, would be found the most conservative elements of Native culture. I must also point out here an element little

appreciated in ethnological studies that I have seen, an element that is the fundamental difference between the English conception of the individualistic "home," and the Maori notion of the communal *kainga*. This will be found at the root of all the difficulties of Government of the Native race not only in this country but in other parts of Polynesia.

Where, as in New Zealand, the climate and physical conditions made it one of the most favourable territories on earth for European settlement, it was inevitable that an immigrant white race must establish its culture there and expand in time into a vigorous nation, even at the expense of the culture of the aboriginal inhabitants. Colonization, as planned by Edward Gibbon Wakefield and others, was aimed deliberately at the transplantation of the best elements in English culture to the new land. In the practically virgin areas of Canterbury, Otago, and Southland the scheme met with no checks from a rival Native culture. In the North Island such checks existed and were met. The colonization of the Northern peninsula was a haphazard affair, and afforded a much more interesting study because the cultures found themselves thrown the one against the other without design and, as it were, in the natural, uncontrolled course of ethnic development. In the Wellington Province the Wakefield scheme came into conflict with tribes newly established at Wellington, Otaki, and along the Manawatu Coast, where they had recently succeeded by force of arms in subduing Ngatiira, Muaupoko, and other aboriginal peoples. The newcomers, as colonists themselves and barely established in new *kaingas*, had not perhaps had time to weave associations and traditions round the beaches, the streams, and mountains of the conquered territory. This would probably account for the readiness with which they parted with the conquered lands. It would also account for the ready response of the Ngati-Raukawa, Ngati-Toa, and Ati-Awa, the immigrant tribes, to accept European settlement and culture. With them it is found that the old communal system of land holding and the communal idea of the *kainga* gave way more readily, if not more thoroughly, to the invading conception of individual ownership and privacy in the home. Superficially, they appeared to have become Europeanised more rapidly than any tribes to the north or to the east of them. This was perhaps an accident of history, but the circumstance does give rise to the speculation that, if those who eventually came to control the introduction of European culture to the Maori people had penetrated to the root difficulty, the absence of the idea of "home," and had deliberately swept away communal land-ownership and replaced it with the

English conception of a man's home being his castle, the effective adoption of English culture might have taken place much earlier in the history of the Maori race.

To the end of the nineteenth century a policy of drift characterized Government action or inaction in regard to the health of the Maori people. Degeneracy, neglect, infant mortality, the practical abandonment of Maori material and ways of dress and the adoption of European clothing, the removal of the incentive to labour and hard physical exercise—these and other facts have been deplored as contributing to the physical decadence of the race. The old sanctions of *tapu*, priestly control and chiefly *mana* had disappeared or persisted in degenerate forms and practices, and the new culture had not as yet provided effective substitutes, or, if they existed, had not been admitted to full control in the Maori social organization.

It was at this stage that the influence of education on the mind of the new generation of Maoris emerged as a serious factor in the co-ordination of elements in the disappearing Maori culture with the pervading *pakeha* culture. The emergence of the educated Maori youth and the part it has taken and is still taking in reorganizing Maori culture, if I may still so designate it after it has been battered about by the invading factors, should provide one of the most interesting studies possible for New Zealand psychologists or practical politicians.

The representatives of the Young Maori Movement possessed of the intuitions of their forefathers and having in the schools, at college, and in society acquired some facility in looking through *pakeha* spectacles at racial problems, claimed the privilege of advising the course that legislation and administration should take. They found in the late Sir James Carroll, then Minister of Native Affairs, and a master-psychologist, an elder prepared to indulge the views of the rising generation. The *Maori Council Act*, 1900, resulted. The idea was that a Council composed of representatives of the tribe inhabiting a district should act, *inter alia*, as a Health Committee with power to administer sanitary and kindred regulations in the villages. Model by-laws drafted by the Department were circulated among the various Councils. These were based on the recommendations of the Young Maori reformers. The Councils culled from the draft the by-laws which suited their conditions. In each village a Committee was appointed to administer these. These bodies so effectively broke down the last resistance of old time Maori customs that in 1920 the *Public Health Act*, with European adminis-

trators and inspectors, was admitted with very little friction into the everyday life of the Maori people. I may add that recently, when New Zealand assumed the mandate over Western Samoa, the model by-laws prepared for the guidance of the Maori Councils of New Zealand twenty-seven years ago were adopted there with modifications for use in the Samoan Villages.

Most of you have read of our Polynesian customs and practices relating to the dead, of the *tangis* or mourning feasts, of the long lying in state, with the danger, if it was the case of an infectious disease, to the health of others; and, in later days, of the accompanying debauchery and waste. Every reformer had preached against the persistence of these practices as dangerous, wasteful, and degrading, but it was no easy matter to secure improvement. The danger to contacts might have been minimized or removed by embalming and disinfection, but this would have cost too much, and at one time would have been deemed desecration. The altered mental attitude of the people towards these practices was evidenced by the very mild protest made when the Council passed a by-law requiring burial within a limit of three days in the cool weather and of two days in the summer, unless special circumstances demanded speedier interment. This was a small measure of reform on the face of it, but how much of the old culture was surrendered to make way for it, how much adjustment had to be made in the mental attitude?

In the year 1898 it may be said that the *Whare Runanga*, the common meeting house of the village, was still constructed on ancient lines, which as regarded ventilation provided for only the front door and window, both of which remained tightly closed, when the house was not occupied, or at night, when the house was so congested, that you could not stretch yourself out at full length. Doctors, missionaries, school-teachers had preached ventilation for two generations without appreciable success. To put a hole, much less a window, at the rear end of the meeting house, or on the side walls, was an unheard of thing in Maori land, although our relatives in the warmer islands of the Pacific would have wondered at our ignorance and backwardness in this respect. The educated Maoris once more rose to the occasion with their acquired faculty of seeing with the eyes of both races. This was clearly a case where a concrete illustration of the proposed reform might have far reaching effects. A meeting house on the East Coast was made the first example, two windows being inserted at the rear end thereof. In 1901 the Maori Councils without exception adopted a by-law requiring the proper ventilation not only of meeting houses but of private dwellings as well.

Seventeen years later it was possible without straining Maori prejudice to progress as far as the provision of a chimney, a back door, and even an accessory porch over which food might be served direct from the detached cook-house.

These are sufficient, I think, to illustrate in regard to the village life of the present day Maori, how governmental action may adapt itself to the changing mind of a Native race, if that mind is placed under close and honest observation.

So, too, in regard to the ownership and occupation of land. I dealt with this matter at length in an address to a group of students here recently. I showed how New Zealand had pursued for sixty years the policy of individualization of land titles through the Native Land Court, in accordance with the declaration of the Treaty of Waitangi and of the *Native Rights Act*, that Native land titles should be determined according to Native custom and usage. The effect of this process, as conducted through the ordinary machinery of the Native Land Court has been apparently to produce chaos. The policy has been carried to the bitter end, but has apparently failed to secure individualization. Here, again, the Young Maori Movement has taken the situation in hand, for the time had evidently arrived for welding the results of fresh work into useful shape. Consolidation of interests, scattered in almost useless fashion over many counties, was suggested as the solution. It would in one operation aggregate these interests on a valuation basis in one or two compact holdings, and also bring all elements in the title up to date. It has taken sixteen years now to popularize the new system in one district, the East Coast, but it is being adopted elsewhere, and it is hoped that the Government will extend it to all parts of the Dominion.

I am conscious that I have covered the ground very inadequately in this paper so far as New Zealand is concerned. The contention of cultures here has been controlled by the outstanding policy of effective European settlement in a country and a climate eminently favourable to it. Maori culture has been compelled to conform to it, but the adaptation has been vastly facilitated by the education of the Maori people and the development in them of the faculty of seeing from two different angles.

When we leave New Zealand and consider the case of the Cook Group, which came under our direct control in 1900, and the case of Western Samoa, the mandate over which was acquired quite recently, we are brought into touch with two closely related branches of the Polynesian race. Rarotonga and Samoa have this feature in common as distinguished from

New Zealand, that it has never been seriously contended that either is suitable for European settlement. In Rarotonga the policy of Government has been largely "Rarotonga for the Rarotongans"; in Samoa it is said, that New Zealand's policy is "Samoa for the Samoans."

British success in New Zealand in administering Maori affairs justified the expectation that her administrators had thoroughly mastered the art of governing Polynesians. This was quite reasonable and has been justified in regard to the Cook Group. The trader element there has caused trouble at intervals, but the complications were never as serious as in New Zealand. The experience of New Zealand has been applied in all departments to Cook Island conditions without difficulty. It should be noted, perhaps, that the Cook Island administration has been more or less associated with the Native Department of New Zealand. The official head of the administration has almost, without a break, been a politician with an expert knowledge of Native Affairs in this country.

I should say something here about the *taihoa* policy so intimately connected with the name of James Carroll. *Taihoa* became a term of opprobrium, synonymous with marking-time, stone-walling, and retrogression. It was thrown at a man who, himself the product of two races, the Irish and the Maori, entered Parliament forty years ago and in his first speech advocated the full equality of the Maori and of the *pakeha* in law. He lived long enough to modify that policy in view of the differences in culture, inequality of experience, training, and standards. He could see as well as, if not better, than any man of his time where advances might be made in legislation and administration. But he could also see that to secure success each reform must be timed psychologically. In resisting the pressure of settlers actuated by their own policies, he earned for the *taihoa* policy public displeasure.

He was followed by Sir William Herries, who presented the contrary policy—the policy of hustle, whether the Maori mind was ready or not to accept his measures. He found in office that the *taihoa* policy was not the creation of his predecessor, but was imposed by the fundamental conditions of the problem to which every Native Minister has to address himself. That policy applied to Rarotonga, administered sympathetically, meant that every element in the immigrant European culture, which, by its substitution for the pre-existing usage, fitted the Rarotongan better to live in a world where modern science had brought him into touch with other races and other ideas, was introduced in ordered

sequence and to the extent that the Rarotongan was ready to receive and benefit by it. There was no upheaval as in New Zealand, no violent unmooring from old beliefs and sanctions. But a steady pressure is being applied in all directions, whereunder each succeeding generation of Cook Islanders may be influenced to advance gradually from one culture to another, or, as is most likely, to a blending of elements of the old with the new.

A few words on Samoa and I have done. Western Samoa came under New Zealand control in circumstances that are well known to you. One circumstance associated with the Mandate, the fact that it was given by the League of Nations, probably led to the creation of a special Ministry, that of External Affairs. This title had a high imperial sound that seemed appropriate to New Zealand's occupation and conquest of Western Samoa, and to the emanation of her mandate from the conclave of the Nations of the world. New Zealand assumed the mandate with a reputation for expert, tactful, and wise government of two branches of the Polynesian race. She had behind her the experience of a century in this country and of a generation in Rarotonga. She was supposed to have mastered the intricacies of the Polynesian mind. There need then be no fear that in Samoa she would not profit by the lessons so laboriously gathered over four generations.

The case of Samoa is before a special commission, *sub judice*, as the lawyers would say. But one may venture a few remarks without breach of the rule relating to cases under review by legally constituted tribunals.

I can say that in Western Samoa we have not altogether benefited by our New Zealand and Rarotongan experience. Was the creation of a Ministry of External Affairs and its detachment from the Native Department a wise step? The experts of that Department have not been used or consulted. It seemed as if we have ignored the experience whose possession justified an assumption of the mandate.

We have propounded the policy of Samoa for the Samoans, and, as Samoa is not considered suitable for European settlement, this has been easy to formulate, and its pronouncement has given us great satisfaction. In following up our pronouncement of policy we have, I think, shown an over eagerness to prove to the world how competent we are to handle such problems. This may be termed the pardonable pride of the *tohunga*. Here was the opportunity for our ethnologists to survey the social setting of the Samoan race, to appraise the extent to which previous contact with European culture had affected the Native culture and to adapt our

New Zealand and Rarotongan experience to the conditions revealed. A *taihoa* policy such as was applied in Rarotonga would have answered well in the years during which we learnt and accumulated data. It was not wise to assume that because we knew the minds of two representative branches of the race, we could forthwith effect easy entry into the mind of the Samoan. Some of our Maori ancestors left islands of the Samoan Group many centuries, perhaps a thousand years, ago. The English, who have not been a century in New Zealand as an organized society, are already resentful of the importation of experts from their homeland to administer departments of State. These would have to acquire what is known as "the colonial view." Our present immigration policy demands that immigrants shall be of the kind most ready to adapt themselves to New Zealand conditions. Was it reasonable, then, to assume that knowledge of Maori culture in New Zealand and the Cook Group would at once enable us to tune in to the Samoan mind, or to appreciate a culture that must in its tropical setting have many local variations?

Our policy is superb in its simplicity; our intentions, their justice and honesty, cannot be questioned by any tribunal in the world. Our methods may be seriously questioned by the anthropologist, whether he be a university professor or the proverbial man in the street. We have probably overestimated the receptivity of the Samoan mind. We have probably not sufficiently appreciated that the social structure of the Samoan people has not been uprooted as was that of the Maori nearly a century ago; that, therefore, it is not as advanced from a *pakeha* standpoint as that of the Maori to-day. We have much to learn of their customs relating to land tenure. We do not thoroughly understand the status and position of their hereditary chiefs. We have not given ourselves sufficient time to learn about the Samoans from themselves before launching at them those reforms which we think would be for their benefit, because they have proved beneficial to their relatives here and in Rarotonga.

I may conclude by quoting some lines from Lawrence's "Revolt in the Desert," à propos of the blustering tactics of a British general, when a clash appeared imminent between the Arab and British leaders towards the end of the Palestine campaign:

My head was working full speed in these minutes, on our joint behalf, to prevent the fatal first steps by which the unimaginative British, with the best will in the world, usually deprived the acquiescent native of the discipline of responsibility, and created a situation which called for years of agitation and successive reforms and riotings to mend.

CIVILIZATION AND THE PHILOSOPHIC OUTLOOK.¹

By REV. H. K. ARCHDALL, M.A.,
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"WE are living, to-day, under the sign of the collapse of Civilization" writes a famous European publicist, and his words find many echoes in contemporary literature. Our situation has not been produced by the Great War, as some easy going optimists would have us believe: the war was but a crucial manifestation of our spiritual "atmosphere," though, of course, the world cataclysm has reacted disastrously and intensified our difficulties. Just below a mighty cataract, we are driving along in a current full of formidable eddies, and it will need the most gigantic efforts to rescue the vessel of our Fate from the dangerous side channel into which we have allowed it to drift, and to bring it back into the main stream. We have drifted out of the main stream of civilization for many reasons, but chiefly because, for many years, there was not amongst us modern men sufficient reflection upon what civilization is. On the one hand, all over the world, in an age of wonderful advances in scientific knowledge about the material world, civilization has become increasingly identified with material advancement and the money values which make it possible. On the other hand, the more the material aspect of life has been emphasized at the expense of other and more fundamental kinds of experience, the more has humanity lost unity of outlook, both in the individual life and in all man's social groupings.

Now History seems to teach us that civilization has always progressed when there was a common spiritual outlook which expressed itself in the control and direction of the material side of life; which made men free and happy by organizing social life for ideal ends. Civilization was never merely a collection of individual facts; rather was it their unification and inspiration by some "universal principle." It was both inward and outward, and produced a sense of direction and progress in all human affairs. The danger of our present situation is just the loss of this sense of a common, united direction for our life, and the further we go the less we are able to appreciate the real facts, until we come to deceive ourselves as to the conditions on which the progress of civilization depends. Thus we crossed the threshold of the 20th century with an unshakable conceit of ourselves, and I doubt if the worst war in history has yet succeeded in shaking us out of our self-complacency.

¹A lecture, given at Auckland University College under the auspices of the Australasian Association of Psychology and Philosophy.

Two tendencies have aggravated our difficulties, namely, evolutionism and over-specialization:

Evolutionism.—I speak not of the splendid results of evolutionary science, but of the dim half-baked view of life which has happened, quite unnecessarily, to accompany it. Instead of keeping a firm hold on the permanent conditions of all the ideal sides of our life—intellectual, moral and æsthetic—and thus maintaining those spiritual and absolute values which are our only sound basis, we have contented ourselves with a mass of mere description about the history of the development of the world and of human society. We have in short committed the first-rate blunder of confusing origin with validity. Hence, the belief in absolute values and in the laws and principles which such a belief entails, has receded, until we fail in courage to deal with the whole of life, both as it is and as it might become. Different sections of people concentrate on the material or spiritual sides of life, and what ought to be fruitfully complementary has become pathetically antithetical. No analysis of our current tendencies can possibly be helpful which fails to see what a grave problem has thus arisen.

The over-specialization of our age is the second tendency which threatens our hold on real civilization. Specialization is a most prominent feature of our modern centuries. Each branch of knowledge has selected its own special subject-matter, and has claimed absolute freedom from interference in dealing with it. Each branch of knowledge has forfeited the right to dogmatize about the world as a whole in order to perfect its study of a part. The geologist, psychologist, biologist, chemist, scholar, historian, artist, religionist each pursues his different path, irrespective of the conclusions of others and of the conclusions of any central authority, with the result that the unity of the mind, and so of civilization, is gravely threatened.

Of course, the delimitation of spheres is not achieved without friction. Still an attitude of mutual tolerance has been arrived at, and this attitude of mutual tolerance is eulogized as constituting that freedom of thought which is the most priceless gift of modern centuries. Indeed, its practical results for good have been enormous; but nothing should blind us to the dangers of the situation. There is great need to remember that it is only within certain limits that specialization goes hand in hand with real freedom of thought. Beyond these limits specialization becomes the minister of intellectual slavery. All specialized efforts are valueless unless they contribute to a common end, and the more the partial views of life are multiplied and variegated the more imperative is the

need that we should have some grasp of the end to which all contribute—some common principle which enables us to attain to a unity of outlook on life as a whole. It is just when the whole is lost sight of, when analysis destroys what Plato called "the synoptic glance," that specialization tends to the slavery of thought. The narrow-mindedness of the expert, whose judgments are completely limited by the outlook he derives from his special subject, is one of the great dangers of modern civilization. (It was this tendency that Darwin felt and regretted in himself without being wholly able to break free from it.) Left to himself, the specialist continues to dig his own pit and to sink down into it, until he is apt to take for a horizon what is in reality only the edge of his grave.

Moreover, the multiplication of all the specialized views of the universe has led many men to despair of formulating any general principles. They preach a gospel of tolerance which is, in effect, a message of despair. The best many men can do is to hold on, without assurance of conviction, to any opinion which may happen to suit them. Such depreciation of our powers constitutes a bondage which leads to unnecessary pessimism. And pessimism will never be conquered by a facile assumption that all our divergent and conflicting efforts must find their co-ordination in some higher truth, unless the nature of this unifying principle is explained to some extent. Lack of certainty as to the final end of all the divergent paths will, in practice, produce impatience and the vulgar kind of intolerance nowadays clothed under a haughty indifference.

In short, if there be no common good, there can be no true liberty of thought, no true unity of mind. To acquiesce in anarchy is not to pursue progress either in politics or in the deeper thought which underlies civilization: true breadth of mind seeks to find room for the greatest possible variety of opinions as all contributive to a common truth, and it is only possible and reasonable when it is rooted in a sure conviction as to ultimate principle.

Now it is philosophy which has always been specially interested in ultimate principle; in reality as opposed to appearance; in the necessary presuppositions of rational, moral and æsthetic life. The purpose of this lecture is to enquire what bearing a truly philosophic attitude has on some of our problems about civilization. For philosophy is far more an attitude than a system. Its special task is to liberate the mind from prejudice and partiality, and to stop people taking the part for the whole. In point of fact, there never has been and there never can be a final philosophy, any more than there can be a final musical symphony or a final lyrical poem. The temptation we must beware of is, to try to have

a system which leaves no unexplained mysteries at the root of things. There have been many systems of philosophy in the course of speculation, and what we now have is no one such system. Europe has seen three main systems rise and fall (the Greeks, Descartes and Hegel), and we are living now in the period of the break up of the pretension of the Hegelian system to have explained "all thought and all existence" (cf. Hegel's idea that in this thought the Absolute was coming to self-consciousness).

I would venture now to stress the point that some at least of our problems in civilization are due to mistakes in the general attitude of much 19th century and recent philosophy. Philosophy claims so many of the ablest minds of each generation that it is reasonable to ask that they should apply the philosophic attitude in a fruitful way to the problems of civilization. Unfortunately, many philosophers have taken up a position of Olympian aloofness, and have often given the impression that they were aiming at inventing a system of life and thought, out of touch with the imperative needs of human life. Philosophical discussion did not seem to touch human experience and the facts of life. It ought to have let its convictions go forth as fruitful ideas to influence the general thought. Unproductive capital ceases to be creative. Merely to reflect on the results achieved by the individual sciences is not enough. Philosophy must deal with what Narisco calls "The Great Problems," if she is to have a message for the great world. Sooner or later, any valuable philosophical thought must be capable of transforming itself into a living philosophy of the people, and of dealing with the primary deeper questions which individuals and the crowd are thinking about. Philosophy cannot survive either in the form of gold coinage minted in the past for the needs of the past, or in the form of unminted bullion never put into circulation. It is the hunger of the present that must be appeased; the attitude of the priest and the Levite in the parable of the good Samaritan is not really very helpful. It seems quite certain that the main business of philosophy is to be the guide and guardian of the general reason, that is, the reasonable life as it is actually lived by man. It could do much to help to release the energies needed for the establishment and maintenance of the ideals of civilization; but it can only render this service if thought does not abdicate from its high function. There are certain imperative needs which man finds in the course of his logical, ethical, æsthetic and religious experience—needs which must be met if life is to have a real meaning and value, and thought must have a good deal to say about the interrelation of man's various attempts at knowledge of reality.

Unfortunately, in modern times, the method of treating the problem of epistemology, *i.e.* the meaning of man's knowledge, has been so largely conducted in a spirit of aloofness from the historically real way in which man has sought for knowledge in science, social life and politics, education and culture, art and religion. It is not the business of philosophy to invent some substitute for the knowledge and experience which is simply "given" in man's historically real experience. To attempt this produces the abstract critic who cannot construct, and leaves us with a philosophy standing over against the growing civilization it ought to help. Metaphysics, as a matter of fact, has no special infallibility, and its main business ought to be to liberate the mind from prejudice and ignorance, and thus prepare it to receive illumination from sources beyond the lecture-room and technical discussion, in short, from life itself in all its fullness. We rightly condemn a religion which divides life into the "sacred" and the "secular." But we must equally condemn any attempt of philosophy to reflect on knowledge *ab extra* instead of seeking to guide its development in man's actual experience. Another way of saying the same thing is to declare that "all thought exists for the sake of action." The end of all knowledge and especially of all self knowledge is the freer and more effectual self-revelation of human nature in a vigorous practical life. If thought were the mere discovery of interesting facts, its indulgence in a world full of disparate evils and among men crushed beneath the burdens of daily tasks too hard for their solitary strength, would be the act of a traitor.

That there is something wrong is proved by the fact that the great public does not cry out for philosophy as it does, for example, for novels and picture shows. In the large, it is true that philosophy pipes to a generation that will not dance, and the same must of course be said of the present position of both art and religion. To a large extent, this is a special failing of our age. Leaving aside the inevitable fact that great men of all ages are never appreciated till they are dead, it remains true that in so much current philosophy, religion and art the great public is not given that which holds and directs it fruitfully. The public is keenly interested in football and racing, business and wages, and mildly interested in politics and education; but in art, religion and philosophy it is not interested. It is not moved to excitement by news of an event in the world of painting or of metaphysics, as it is by a new idea in the technique of rugby football or a movement in prices. This is not said in any spirit of contempt, but it is a new fact and, I believe, an ominous one. Yet philosophy, art, religion, politics, science and education are all necessary human activities, basal to civilization.

The fact seems to be that the producers and the consumers of spiritual wealth are out of touch, for the bridge between them is broken. There is much production on one side and much unsatisfied demand on the other, and the demand being unsatisfied, takes many strange and illusory forms for its gratification. It is not that our age suffers from a lack of spiritual energy: we are still capable of "shunning delights and living laborious days." Yet our civilization is in difficulties and is, in some peculiar way, morbid. For we have lost hold of the vital principle of the unity of the mind and of the general interpretation of the various activities of the mind, in which each is influenced by all. The result is that our civilization is not a healthy developing organism, and despite all our fussy activity we have largely lost our peace and happiness. The mark of modern centuries is the severance from each other of man's various interests. A sort of Negation peace has thus been won; but it is an illusory peace: for peace means helpful interpretation and not self-centred isolation. However intensely we may develop partial aspects of experience, all is inward disunion. Priests and philosophers, artists and scientists, statesmen and educators live alongside each other. They do not live together, and no social organism is formed. Yet, in reality, all the many sides of human nature properly belong together, and they cannot function properly in isolation. Men may be excused for thinking that in their mutual separation lay the secret of their well-being, for have not our modern triumphs been many and considerable? But, sooner or later, partial views lead men into some desert where the world of human life is lost and the very motive for going forward disappears. This is the point to which we have come to-day! Art, religion, science, philosophy, politics and education have largely lost touch with the real needs of mankind. Nowadays we can be as scientific, we can be as philosophical, we can be as artistic, we can be as religious, we can be as educated as we please, but we cannot be men at all; we are wrecks and fragments of men, and we do not know where to take hold of life and how to begin looking for the happiness which we know we do not possess.

I cannot hope in the compass of a single lecture even to try to point out what we should do to be saved from these present distresses. I would seek just to stress the necessity of our aiming to reunite the scattered fragments into a complete and undivided life. We can be sure that the only life worth living is the life of the whole man, made possible by the unification of every part of life in a single corporate mind, in a single organic system. Probably, what we need first of all to-day is a clear understanding of what is happening

in the various isolated fragments of human life, as they develop more and more their negative freedom. I would take, by way of illustration, certain salient tendencies: education, politics, science, religion.

Education.—It is vitally important that we should cease to be hoodwinked by optimistic phrases about current education. To lose the power of self criticism is likely to end by robbing us of more than we at present realize. We have spread education quantitatively and we have largely mechanized its control, but we fail to see that it has become largely dehumanized. Our ideal is far more utilitarian than humanistic. We pretend to be democratic, but we are really plutocratic, for we think primarily of fitting the young to fill some economic niche. Education is largely a "ladder" leading to a competency, while it should be a highway leading to fullness of life. The economic aspect of life, however important, is not a sound basis for either culture or citizenship, as we are likely to find out as time goes on. The trail of this particular serpent can be seen in both school and university. In school it is the "bread and butter" subjects which are popular, not the subjects that train the mind or lay the foundation for a culture wide and deep. It is a widely used argument for ceasing to study some subject or other, that it is of "no use" to the boy or the girl, and it is rarely asked of "what use" is the life of the young. Exact thought, fineness of taste and stern self discipline are at a discount, and the latest *cliché* is the gospel that the young just need to "express themselves," whether or not their particular kind of self is worth expressing. It is likely to end in what a French writer has cleverly called "the cult of incompetence," in the decline of real mental power, in the production of the informed but the uncultured, and in the pert provincialism of lost manners and distinction.

It is significant, too, that far more attention is paid to method than to the ideal of education; far more concern is shown about the technique than about what may be called the philosophy of education; the letter is stressed, while the spirit is in danger of being lost. Surely, technique is not nearly so important as personality. For personality in the teacher makes personality in the pupils. A child is born a person with amazing possibilities, and person must come into contact with person. Education is thus essentially the evidence of things not seen, the testing of things hoped for. A child's mind is one and works all together and will only develop naturally when all the possibilities of body and mind and spirit are explored at once. If the child's mind may be likened to Humpty Dumpty, we may say that we help to put

asunder what God has joined, and we wonder that, after the fall, not all the King's horses nor all the King's men are able to put Humpty together again. In fact, the more utilitarian our ideal becomes the less respect are we able to feel for the sacredness of the child's personality. Hence, all those sides of human nature which respond to the absolute value of truth and beauty and goodness, tend to be treated as a sort of side issue as compared with the dominant interest of "getting on." In such an atmosphere, neither religion, nor morality, nor art, in fact, no general point of view about life can have a reasonable chance of taking successful root, and the youth is dehumanized in so far forth. Antitheses are set up in the child's mind which should never appear. Authority and freedom are set over against each other, and the possibility of proud subjection and dignified obedience are tragically missed. An antithesis also appears between the society and the individual, and the former either crushes the latter or the latter adopts a futile attitude of revolt from the former. Again, the mind is informed, but the will is uneducated, and the emotions are starved, and if Wordsworth is right in declaring that "We live by admiration, hope and love," a great deal of our modern education is missing the mark most pathetically. We fancy that information (the sort of thing which can be tested by examination) is our main instrument of education. In reality, it is only one channel through which the real substance of education can run its course. Actually, education is an atmosphere, a discipline and a life based on ideas and spiritual nourishment. I believe that it is perfectly possible to admire many individual aspects of much modern education, and yet to hold that what I have said is substantially true.

The same trouble appears in many of our modern universities. The very idea of a *universitas* of knowledge is given up, and we are left a string of detached faculties, the business of most of which is to give technical training in some professional or commercial direction. The idea that a young man or woman should receive a liberal or general education before starting to undergo their technical training is frankly given up. As soon as school is over the technical training begins, and, in some cases, the needs of special faculties control, through Governmental regulations, the details of the curriculum. The result will be, of course, that even professional people will become increasingly "one-eyed" and as small as the means whereby they earn their living. From such a policy it will be idle to expect the development of leadership from those who should be most qualified to lead. To my mind, it is a serious thing that education, which should emancipate and broaden mankind, is likely to give him a

partial and one-sided outlook. While it remains possible for a professional man or woman to graduate and practise without knowing much about the great institutions and principles of history, or the great problems of philosophy, we are quite obviously killing the goose that lays the golden egg.

I think it is clear that we need a good deal more of the philosophic in regard to education; we need to see the whole and not merely the part, the ideal and not merely the technique. Great possibilities in the future of civilization and culture depend thereon.

Politics.—Another set of human problems which demand a philosophic outlook, if they are to be solved aright, is what we call the social problem, which includes politics, government, industry *et cetera*. This is pre-eminently the pressing problem of our age, and on its solution depends to a large extent the character of our civilization. In this sphere, we find the same tendency at work, namely, the spirit of derisiveness and mental antagonism with regard to “symptoms” and a steady refusal to deal with “causes.”

In politics and in industry, the essential and fundamental idea, which needs elucidation, is that of the common weal. Quite clearly, if there be no common weal, then social unity is impossible, and social life will pass through disunion to anarchy and back to the methods of the jungle; but equally clear is it that the common weal cannot be defined in any material sense, since the more I have of such material values the less you have, and no distribution thereof can ever be stable, unless the people who participate therein are able also both to help and to enjoy a common weal which is not material in character. It is, in short, the imponderable things, like justice, love and brotherhood, which hold a community together, and morality and religion are, as T. H. Green so often reminded us, “the basis of political obligation.” If a state does not draw its inspiration from high ethical ideals, and if those ideals are not based on eternal sanctions, all its political and economic life is soured at the source. There may be much activity; there will be little real progress. In other words, the thought we need is that which works from the welfare of the whole to the welfare of the parts, and comes to see how important it is to the welfare of the whole that the parts should be developed to their utmost capacity.

All our communities, so far as they really exist as organisms, must be such as to call forth the unceasing endeavour of every individual, and yet it must be the aim of the community to develop all individuals up to their highest possibilities. Clearly, no such community exists in material form, but the vision of such a reality has been the magnetic

power which has created such progress as we have actually won in the past. No mere analysis of existing communities can create such a vision. It is a matter first of all of faith, duty and loyalty, and then of achievement. Because we have lost so much of this vision of community life, we are left with a series of false antitheses which darken our horizon and drive many who should be leaders to forsake the social task altogether.

Both in politics and industry it is the fruitful interweaving of the two principles of order and liberty that brings progress. But nowadays they are set up against each other in fruitless isolation. Liberty is falsely conceived as the licence of the individual, or the party, or the class to do what they please in their own interest; and the best conception of order we can attain to is a system which crushes initiative and leads people to think that, if we only lean up against each other long enough, progress will ensue. Thus, anarchy, both amongst the rich and the poor, faces various systems of control, such as theoretical state socialism, or the recrudescence of despotism—both of them equally futile. An order that crushes freedom, and a liberty that degenerates into licence, seem to be the charming results which follow the loss of the philosophic attitude to community life. The result is a whirling wheel of action and reaction, whereby despotism passes into democracy and democracy back again to despotism.

The same trouble appears once more in the vicious antithesis between the individual and the society. A philosophic attitude of mind would bring people down from empty theories to an appreciation of the concrete difficulty of this whole problem. We would see how easy it is to educate the individual out of his sense of social unity, and how fatally easy it is to mistake ignorant crowd psychology for the reasoned judgment of a true group. The world to-day is full of detached individuals who have little capacity and less conscience, individuals out on the make, who know not how to use either success or failure. Contempt on one side and envy on the other rend the social organism to pieces. And those very individuals are not seldom the prey of crowd psychologies, in principle both violent and absurd. We have largely lost touch with the principle that "if we don't hang together we will hang separately," as the American humourist has it.

Once more, a false antithesis has been created between the State and society, between the organ of government and those social groupings of which it is the government. The very idea of a philosophy of the State and society is hardly considered. Here I would simply re-echo the profound words

of the late Lord Acton, who said that the doctrine of the omni-competent State is chief idol and the greatest danger of modern history. Since the Renaissance the view has developed, first under monarchies and then under national governments, that outside the governmental State no social groupings has more than a concessionary right to exist. The family, the guild, the church, the union, the educational organism (be it university or school) has no inherent right to exist and function, and no real freedom of action. Thus the big machine is constructed; men learn to lean up against it, become passive, and then are not big enough to manage effectively the big machine that has warped them. I am convinced that freedom in our age largely depends on the recovery of the view that the State does not consist merely of individuals, but is a society consisting of many societies. It is in the smaller (but not less important) social groupings that the individual first learns the organic relation of the individual and society; and if he does not learn and relearn this lesson there, he will inevitably invoke the larger unity of the State to crush his freedom, or he will arise and smash it.

Science.—A third set of problems, now being created in our civilization, arises from the recent wonderful progress of natural science. Broadly speaking, the problem arises from the fact that there is little philosophic background in men's minds to help them to correlate the various kinds of scientific knowledge into a sound general view. A great deal of unnecessary scepticism and loss of progress has resulted, not from science itself, but from the absence of a sound philosophic outlook thereon. This may have been partly due to the antagonism during the last half of the 19th century between "philosophers" and "men of science." Many philosophers were hopelessly inaccurate in their knowledge of the facts with which serious thinking has to do, and many men of science promulgated first principles which were simply improvisation wild and weird. Some metaphysicians wish to exalt their own pursuits at the expense of the special sciences; and some scientists were wont to pride themselves on the contrast between the supposed finality and definiteness of their own results, and the supposed vagueness and dubiousness of the conclusions of the philosophers.

But the fact is that neither philosophy nor science can be fruitfully prosecuted unless workers in both fields of knowledge understand the necessary interrelations of their efforts. Our theories of first principles require to be constantly revised, purified and quickened by contact with knowledge of detailed fact, and our representations of fact call for constant restatement in terms of more and more

ultimate principles. It is noteworthy that in the last fifty years there has been an equally remarkable extension of our knowledge at the extreme ends of these two processes. At the one end a marvellous development of knowledge of scientific detail which will ultimately help both philosophy and religion, and at the other end an equally remarkable advance in pure mathematics and logic. But, in between those two extremes, there has been great vagueness and uncertainty as to the meaning and the implication of the categories used in different sciences, and our materialisms and mechanisms have been the result. Nowadays, however, in the works of leading thinkers (though not yet in the mind of "the man in the street" who generally erects into a scientific orthodoxy views long out of date) there is a growing recognition that any subject of discourse must be treated in categories suitable to that special study. The philosophical idea of degrees of reality has come to stay. And as philosophy comes into more helpful contact with scientific research, we can expect to see that scientific ideas of explanation are but symbolisms, adequate only to picture for us a limited view of reality. When we see that scientific descriptions and generalizations are only symbols, as a steel frame is a symbol of a building to be built, we will be able to use science without thinking that it solves the problem of reality or exhausts the wonder of the universe; then science will become a great and liberating force in the life of civilization.

Religion.—Finally, I would ask you to consider how far our religious difficulties in the present age are due to the lack of what I have called the philosophic outlook. Our religious difficulty is mainly due to the relation of religion to the other sides of life, such as art, philosophy and science. Religion has suffered, just as art and philosophy have suffered, from the derisiveness which we have seen to be so prominent a feature of our modern centuries. The churches, we are told, have lost touch with the people. It is true, and it cannot be mended either by scolding the people or by abusing the priests (and the same can be said of art and philosophy). It is the fruit of the Renaissance. The votaries of religion wanted religion for religion's sake, just as the artists asked for art for art's sake and the philosophers asked for truth for truth's sake; and the longing for freedom has now come home to roost in the form of the disruption of life, and we now begin to see that what is wrong with us is the detachment of the different forms of experience from one another, and our cure can only be their reunion in a complete and undivided life. Moreover, the new experience of recent centuries should enable us to obtain a union of life in all its

aspects, far less hasty and far less of a compromise than was even the case in the mediaeval or the early centuries.

For the fundamental principle of Christianity is that the only life worth living is the life of the whole man, every faculty of body and mind unified into a single organic system. Again, it is the outer aspect of this same principle on which Christianity insists when it teaches that the individual man, just because of the absolute worth of every individual, is nothing without his fellow men, that the Holy Spirit lives, not in this man or that, but in the Church as the unity of all faithful people. No one who has outgrown paganism can be content with being "everything by turns and nothing long." He must unify his life somehow by bringing every activity into harmony, for the Christianity of the plucked-out eye and the lopped-off limb is a poor and uninteresting thing. But the unity we seek will not be the naïve Christianity of the Mediaeval Ages, nor the self-mutilated Christianity of the centuries following the Renaissance, but something in which the good of both these is preserved, the bad destroyed. Ever since the barren negations of the 18th century, it has been clear that some new unification of Christianity was the only hope for the world's future. Here, again, it is Plato's "synoptic glance," the power to see life steadily and see it whole, which we need. Partiality, prejudice and intolerance must flee away, and the world will once more set out on the journey for that city which hath foundations whose Builder and Maker is God.

There is no sceptic so deadly as the quasi-religious apologist, who seeks to build religion on the shifting sands of mere custom or sentiment. Again and again, in the modern history of the Church, philosophic acumen would have saved us the unedifying spectacle of foolish panic at the supposed results likely to flow from some new discoveries in natural, historical, or psychological science. At the present time, it is clear that impartial philosophic discussion could help greatly to rescue the various parts of Christendom from turning aspects of faith and practice into unrelated and distorted shibboleths. But it will be able to do this only if it knows religion from the "inside," as it is lived and loved in concrete religious tradition. Moreover, we are on the verge of finding out how to combine authority and freedom in religion as in social life, and, as Leibnitz long ago proved, philosophy could help to prepare the human mind to overcome this most fatal antithesis.

In these and other ways, a philosophic attitude can help us to build a true civilization and recover for humanity the unity of life which is man's greatest desire and his only hope.

PSYCHOLOGY, LEADERSHIP AND DEMOCRACY.¹

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It is a truism to say that it is the function of leaders to lead. There is one aspect of democracy as practised to-day which appears to debar true leadership. This defect is not inherent in the democratic principle itself, but appears to have been accepted in some way or other and has, to a certain extent, become a tradition in democratic countries. Men who are elected to represent the people in deliberative assemblies do not regard themselves as leaders of the people, nor do the people so regard them. Those deputed to enact legislation, in most cases consider themselves as bound to follow the immediate will of the people and do not take it as a duty that they should lead the people onward to a higher and more developed form of the people's own will which may as yet be unconscious.

This attitude, both on the part of the people and their representatives, prevents democracy from coming to its own and reaching higher than the average political mind; it prevents democracy from rising above the present level and producing aristocrats in the true sense of the term; it prevents democracy from finding leaders. The state is thus left to struggle blindly on without moral and intellectual guidance. Those chosen by democratic methods, and this is where the true meaning of democracy lies, should hold fast to the principle that they are chosen to make progress—not to follow the mass, but to lead. The people, too, should so regard those whom they themselves place in authority. They are there to represent the people on the road of advancement. All cannot be leaders for then there would be no leaders. Democracies differ from absolute monarchies, tyrannies, oligarchies in that the people choose who shall lead. It should not necessarily follow from this that those selected are to consider themselves as mere agents. No business could be run on the principle that the president and the directors were to be merely the echoes of the shareholders. On the contrary, they are placed in office to advance the interests of the company, and it is this point of view which has been lost sight

¹ Because of its special applicability to Australasian conditions this article is reproduced here by the kind permission of the author and the editor of *The Journal of Abnormal and Social Psychology* in Vol. XXII, No. 1 of which it first appeared.

of in affairs of state. This is the reason why state activities are so often behindhand. Men at the head of affairs wait until the mass has begun to move and have either forgotten that they are supposed to lead or are too timorous to do so. It may be that the desire for office, that is selfishness, accounts for this attitude on the part of the legislators, but it does not account for it on the part of the people. This weakness in democratic affairs can be easily remedied if only men of courage, vision, high-minded ideals, and unselfishness are selected to direct. That such men are so infrequently elected is a serious indictment upon our civilization, a symptom that the dearth of leaders in civilized countries is to be attributed to a lowered state of intelligence and enlightenment.

The individual and his merits are lost in the mass of opinions, and hence one of the greatest problems of the time is to find the individual. In past ages, the individual was prominent to the exclusion of the many. To-day, the many are prominent to the exclusion of the individual, and there has been lost the secret of finding leaders in state affairs. Private concerns find no such difficulty, for the worth of the individual is recognized by an intelligent group. Not so with the mass of the people. If democracy would move forward to an aristocracy of worth, some elimination must take place in order that the stupid, or those unable to exercise the rights of citizenship, will not have a voice in control. To the end that democracy be fully actualized, it must devise a method of choosing leaders on the part of the people and a realization of those so chosen in what their duty consists. After all, a country is great because of its great men. That few of them are found in the direct governing of the country is a reflection on democracy and evidence that the principles of this great movement are not yet appreciated by the mass.

During the last few years, groups have grown up, or perhaps they have become more manifest. This aspect of our political life is detrimental to any democracy. When a seat in parliament represents any one group, then we are back to the days of oligarchy and not necessarily an intelligent or moral one. By this means certain groups are undermining the very principles of democracy, because the political strife is really a battle between the various groups and not one of general welfare to the country. What greatness and accomplishment has taken place in the world has been due to the labours of great men, not of great groups. Consider the progress in science, in art, in literature, in religion and it all harks back to the contribution of individuals. Individualism in the old sense is dead, but we require a new individualism to-day, else we perish. To save democracy we must save

the individual from the tyranny of the mass. If democracy is to be true to its own faith, if it is to govern in such a way as to give all possible opportunity to all men in accordance with their talents, then it cannot afford to lose sight of the fact that the individual must be preserved for the attainment of this ideal.

It may seem a far cry from leadership and democracy to psychology. Yet it will be found they are intimately connected, for our government is but a reflection of the average mentality of our people, and if this is lowered by bad stock or weakened by too much pampering legislation, then we shall lack the ability to produce leaders, and even those who are fit to be leaders will have their task made an impossible one by reason of the low degree of intelligence or absence of moral stamina.

The most important thing in this world is the human mind. The human mind is the real conqueror of nature. The human mind gives us the rich world of imagination portayed in literature, art, science and folk-lore. Our chief aim, then, as a race should be to produce the highest type of mentality and insure that it is immortalized from generation to generation by being associated with an equally superior body. From the racial and long distance point of view, mind cannot exist and function without body. Racially, a superior mind can exist only in conjunction with a superior body. If the mind alone is developed, the very ideal set before us is defeated, for the body will be weak and a brilliant mind will cease when a certain body perishes. If the body had also been developed, the mind would have become an inheritance. History shows us that it is the physically stable races which survive; therefore, the preservation of healthy minds and the accumulation of such minds as a racial acquirement depends on an all round development—body and mind together.

It would appear that in the present era of western civilization there is too much maternalism. Some use the term paternalism, but the attitude is too soft, tender and almost flabby to be designated by a masculine term. Due to this attitude the unfits, misfits and ineffectives are kept alive, nourished and protected as a Christian virtue, although one fails to find good scripture as its basis, but rather the reverse. This class is allowed to multiply, and multiply it does. By defeating the law of natural selection, feeble minds and feeble bodies are allowed to come into existence, allowed to reproduce their kind and thus lower the general well-being. In a sterner and more virile sort of society this does not happen. These people are not contributing to the good or

betterment of the world, but rather they make many hideous and baffling problems. We not only tolerate them, but support them because of a false interpretation of what is meant by racial hygiene and social welfare. In former times, many factors played a part in the elimination of the unfit in mind and body, such as exposure, syphilis, alcohol, war, etc. On the whole, only the more rugged survived, that is, those who could resist temptation or had the intelligence to protect themselves from dangers. Now all things are changed and instead of looking after ourselves we look after one another. It is like taking in one another's washing. No longer do self-denial, self-restraint, temperance, initiative and aggressiveness count. We cannot do evil even if we wished. Our civilization has become one great comfy hostel where there are no dangers, no temptations, a place where the sterner qualities are no longer cultivated because they are no longer necessary in the struggle to live, for there is to be no more struggle if the weaklings have their way. Mediocrity controls. The fit still survive, but the unfit still more survive, and the time, the energy, the intelligence and the moral forces of the intelligent part of the community are wasted in caring for and protecting these unfortunates. Thanks to our mistaken, unscientific and unoriented social welfare schemes, the drones and wastrels of society are on the increase and in proportion as they increase will the fit be hindered and impeded on the path to knowledge, truth and betterment.

Prevention is a fine ideal, but usually it does not function early enough. A portion of the child welfare activities about which we hear so much should not be necessary. For example, many communities boast of a low infant mortality rate. This can be accounted for in two ways. In the first place, if the community is intelligent, of course, the infant mortality will be low. The birth rate may also be low, but there is a greater care for the young. In fact, this holds true as we rise in the scale of intelligence throughout the animal kingdom. In the second place, the infant mortality rate may be lowered by caring for the offspring of those who cannot care for their own. In other words, the rate is lowered in many cases by saving the children of the less fit. It follows then that an artificially lowered mortality rate is not necessarily an index of high community intelligence or morality. It does indicate a tender spirit towards the weaker and helpless and is good in so far as it does not detract from our racial integrity and worth, or weaken the racial fibre. If the care of infants means the survival of ineffectives, then such activities have the tendency to lower our national standards in education, government and the higher things of

life. It is well that social workers should ponder over this fact.

This brings us to discuss politics and psychology in a closer sense. In proportion as we allow certain types to reproduce and then foster them, just in so far are we lowering the general intelligence of the nation. These people have the vote just as the best. They may have money or they may not. One thing is certain—they do not stand for the highest and best in national life. Yet our reformers are anxious to protect them because they cannot protect themselves. Society will never be reformed or reconstructed or made better by protecting those who do not wish or who are not able to protect themselves or their own. Society may be made more comfortable, but that is not an ideal for men who wish to live. A civilization from which all the risk, chance, and zest have been bleached has no appeal except to the moral or intellectual weakling, to the one who has not the courage to face the realities of life and by striving live and find himself. A civilization without opportunity for aggressiveness, without, if you like, the possibility of perishing or going to the devil, has nothing to offer to the normal or superior man with instincts and impulses demanding expression. A cut and dried prayer meeting sort of society does away with the individual and his worth, and swamps him in a muddle of maternalistic patter and subnormal reactions to environment. An aseptic society is not necessarily progressive.

Leadership, then, in the true sense of the term can only come about by substituting something for the law of natural selection. Great men can only be begotten by great men. Leaders in any sphere of life are not produced by environment, although it may furnish the opportunity. If we permit the racial stock to be impoverished, then we lessen the chance of, or forbid the birth of leaders. Even if they are on occasion born, their efforts are to a certain extent nullified by the subnormals. In a word, by softening our civilization we are depriving ourselves of the possibilities of leaders, or, to put it otherwise, we choose mediocrities in their place. It would seem that the intelligence of mankind and the scientific results of that intelligence have been applied towards sustaining those who have small survival value. Intelligence thus directed is self-destructive and is proceeding along the path of racial extinction. Plato was right when he argued that the state should be governed by the philosophers and not by the rabble. The same problem is facing us to-day as faced Greece in the time of Plato. His advice was not followed and he who runs may read the consequences for us.

Some of the mistaken beliefs which are so prevalent to-day are due to the very evident trend to view all reforms and attempt the solution of all social problems from the economic point of view. The whole industrial situation is regarded as exclusively economic and the political efforts are really secondary to the economic. Even if all these so-called remedies were applied there would still be an "industrial situation." Here, too, is found, as in other aspects of the social fabric, the abnormal desire to overprotect the weaker brother. The ineffective workman is guarded by his more skilled and effective brother who to that extent lessens his service both in amount and in quality. The measure of service is apparently the measure of the unfit, not of the fit. Thus it happens that the low grade workman is economically the equal of the superior workman, and the latter wonders why he must pay high taxes to support fleets and armies. In this he fails to see that it is those same fleets and armies which enable him to live, for otherwise he and his weaker brother would be replaced by the cheaper labour of those people whose standard of living is lower than ours. Our scale of living costs more than it should, but the cost is due to the manner of regarding the ineffective. What applies to the workman applies with redoubled emphasis to the wealthy loafer and ineffective, who has inherited his status instead of earning it, as also to the commercial protection of the inefficient manufacturer. The whole question is much deeper than economics or politics.

Until our people as a whole give up the notion of ultra protection to the defectives, weaklings and ineffectives generally, or, at least prevent them from interfering with those who construct, until we stiffen the national backbone and put an end to social patchwork, there appears little hope for improvement. If everyone did his own work well, there would be no need for interference and social welfare activities would be unnecessary. The individual who will not do his part should have no encouragement from the community to live on the well-doings of his neighbour. Human nature of the right kind will reconstruct itself if left to itself. The intelligent and moral people of the nation require no reconstruction. The many organizations aiming at the more comfortable world are really making mankind less resistant and thereby lessening the power of survival. We need leaders and leadership, but we are defeating our own purpose by preventing the exercise of those natural laws which eliminate the unfit. Am I my brother's keeper? Yes, by preventing the necessity of calling him a brother, by keeping him in his place if he has arrived, by seeing to it that he does not

beget his kind if he is one of the class that are of little use to humanity, or, if he is one of the elect and of good report, developing in him those qualities which lead to greatness in man and nation. We are certainly our brother's keeper, but too much keeping of a kind may spoil the brother and be of no value to the world. There is much good psychology in the parable of the talents. Not all men have equal talents and this is not always realized by our would-be reformers. "To him that hath shall be given and from him that hath not shall be taken away even that which he hath." Our soft-minded reformers have forgotten this stern aspect of Christianity, but it is well that it should be borne in mind. Protection and repression for the sake of protection will never lead to the realization of a healthy and progressive civilization. We must rid ourselves of the weak, else we perish with him; we must save the race, not the individual. We can save the race only by cultivating the superior type. We must set as our objective an artistocracy of mind as the highest ideal of democracy.

Science instead of being used to patch up the wrecks should be used to make the race stronger, more virile, should aid us in perpetuating those great moral qualities which insure national sanity and stability. Mere shielding from the dangers of life by external organization will not lead to the desired end. The individual must be given the opportunity of looking after himself, of saving his own soul, because no one else can do it. Some will fall by the wayside, but those who have passed through the fire will be able to lead us forward toward the goal of true democracy.

MEDICAL SOCIAL SERVICE.

By BLANKA BURING.

I HAVE often been asked: "What is Medical Social Service, and how does it differ from other social work?"

Without going into detail as to procedure and technique, I shall attempt to give you a general idea of what Medical Social Service is and the part it plays in the practice of modern medicine.

Medical Social Service functions around and concerns itself entirely with the sick, and primarily in principle, definitely dissociates itself from the dispensing of charity in the ordinarily accepted sense of the word; nor is it necessarily concerned with poverty.

In connection with the Hospital, it has its outlet by means of a social worker or assistant, and just as the probation officer is associated with the Juvenile Court, the welfare worker with industry, the social worker with the settlement, so the medical social assistant is associated with the practice of medicine.

Of all forms of social work, it is probably of the most recently organized development. A social element has always been present in the practice of medicine and the care of the sick. Even before the Christian era, the Jews advocated the visitation of the sick; there was also care of the sick among the Egyptians, the Greeks and the Romans, which was not confined to such hospitals as existed, but was extended into the homes. Provision and care for the sick in their own homes was also made in Europe, especially in England, through the monasteries which were the chief source of relief and help until these, with the exception of the two hospitals of St. Thomas and St. Bartholomew, were abolished during the reign of Henry VIII, and although a certain amount of social work was continuously being done, it was not till nearly a century later that St. Vincent de Paul actually began more definite social work in connection with the Paris hospitals. He founded the famous order of the Sisters of Charity. Women of the highest social position, as well as those of more humble origin, did nursing and social work. Unfortunately, after the French Revolution, it almost fell into disuse, and what work was done, was of very low grade.

In England what were called "Lady Almoners" were attached to the Hospitals, and originally their purpose was to investigate the finance of hospital patients to prevent imposition on the Hospital. Gradually they became more in-

terested in the patients themselves and began to labour for their benefit.

It was Florence Nightingale who brought to life a new secular profession; what she did for nursing is so well known that it is not necessary to repeat. It was she who formed the first district nursing association, the members of which did both nursing and social work.

In 1880 in the English Hospitals one finds after-care being provided for patients discharged as cured or convalescent from the hospitals for the Insane.

In 1895 it was the great Dr. Calmette, of Lille, in France, who recognized the importance of treating a patient for tuberculosis in his home as well as in the hospital, and for this purpose he instituted the *visite domiciliaire* (home visitor) as a linkage between the home and the hospital. This was an epoch-making change; it provided a means of educating the patient in his mental attitude towards himself and his obligations to his fellow beings and was one of the first steps towards preventive medicine.

It is to Dr. Calmette that Dr. Richard Cabot, the founder of organized Medical Social Service in America, owes his greatest inspiration. In 1905 Dr. Cabot engaged and installed the first trained social worker in the Massachusetts General Hospital in Boston, and since then the significance and value of social work in connection with the treatment of the sick is steadily becoming more and more recognized as a definite necessity for medical diagnosis and treatment, and the department through which it is dispensed, the Social Service Department, is now considered a necessary adjunct to every modern hospital.

In its broadest sense, then, Medical Social Service is any service extended to the sick, either rich or poor, as a part of his medical treatment, which enables his living conditions to be improved in order that he may be quickly and efficiently restored to health. Of what this service may consist, depends largely on circumstances, in other words, on the social living conditions.

In private practice a physician can for himself see and ascertain the detail of his patient's personal and family history, his health habits, his personal habits and activities, and behaviour tendencies. He also sees the environment, both physical and mental in which he lives and can form his diagnosis and treatment accordingly, and advise as to readjustments that could be made in the home to provide the means for the most speedy and satisfactory recovery. Usually in private practice the economic problem is not the greatest, but often the need of readjustments in the home

are many. These on the advice of a wise and understanding physician can be made in order to set the patient's mind at rest, to provide for his physical needs and so make the conditions for recovery more favourable.

In hospital or clinical practice, it is different. Those details which he could obtain for himself in a home, are obviously not available in the clinic. The physician needs further knowledge of the social and economic conditions than what his patient supplies, and those can be reliably obtained only through the aid of a skilled social assistant. The medical and social are so closely interwoven in treatment that the closest co-operation between physician and worker is necessary. The social worker or assistant is part of the medical organization of the hospital; she is one of the means for diagnosis and treatment, and the information that she can bring as the result of closer investigation of the living conditions, is considered in the practice of modern medicine to be as necessary to the physician as the results of the processes of X-ray and the bacteriological laboratory.

The investigation of the patient is divided between the doctor and social worker. The doctor studies his mental and physical state, and the social worker studies the mental and physical characteristics of his environment.

She notes the surroundings in which the patient lives, whether they are wholesome and bright or unwholesome and sordid. She sees the housing conditions, whether sufficient or insufficient accommodation, satisfactory or unsatisfactory sanitation and ventilation, whether there are sufficient and suitable clothes and food; she ascertains the conditions under which he works, his financial status, his relation with members of the family, whether harmonious or otherwise, and any other mental influences in the home, all with the object of discovering the causative elements of his disease and how they can be adjusted that the best treatment may be effected. Where medical apparatus and supplies are needed, through the aid of social agencies, she arranges for their provision, also for the provision of supplementary clothes, food or money when lack of these impede progress towards health. A change in environment may be necessary, also a change in his employment to suit the particular needs of his disease. The mental strain through too great responsibilities may need to be relieved by placing and caring for children or perhaps invalids or old people.

The social worker, when necessary, also arranges for supplementary care; this involves making arrangements for such things as special examinations, convalescent care or care in medical institutions.

It may be necessary for a social worker to influence the patient's mental attitude towards himself. This involves educating and acquainting him with the elements in his condition which should influence his conduct, the way in which his activities should be adjusted and the reason for these adjustments. It may mean persuading him to agree to an operation, or to enter a sanatorium, or to restrict his diet.

When institutional care is not necessary, it involves seeing that the patient understands exactly what to do and how to do it, in order that he may co-operate to the best advantage with the programme for cure or the promotion of health. He is also made to realize his obligations to others and so guard against the spreading of disease.

The department in the hospital, known as the Social Service Department, through which Medical Social Service is dispensed, becomes a means of education, for the individual and the public, in the prevention and spread of disease, and for the medical students, pupil nurses and students of social work, in social work. The records and existing data kept as a result of social investigations afford a means of research into social causes and results of diseases, which are of use in the ever-developing science of medicine.

To summarize: Hospital Social Work is the application to the uses of a medical institution of a method of adjustment of environmental relationships which is being developed in the field of social work. Its purpose is to contribute to improvement of individual and public health through study of and influence upon social behaviour. Through study of the patient's experience social work should aid in medical diagnosis; through teaching and through changes in the home and work it should aid in medical treatment; and it should help the administration of the hospital through a special knowledge of the neighbourhood, characteristics, needs and resources. The specialization of the social functions of the hospital should make possible research into the social elements of physical and mental health.

The summary forms the basis of all forms of Medical Social Work, whether it be connected with tuberculosis, venereal diseases, maternity work, children's work, or with the more specialized form needed in the practice of psychiatry.

It is in the treatment of tuberculosis that medical social service probably finds its greatest usefulness. Tuberculosis is a social, economic, and family problem and its effects being so far reaching, its treatment may utilize all sources and activities of social work.

Social work has the most effective and quickest results in the treatment of children, as they respond most quickly to environmental influences, both mental and physical. The following furnishes an excellent example of social treatment of a sick child:

A little girl of four years was referred to the Social Service Department from the surgical ward in the hospital. She was suffering from a tuberculous condition of the spine and a most delicate and serious operation had been performed, and it had been so successful that, if after her discharge from hospital she could continue to have good care and nourishing food, she would not be deformed, but would be a healthy child. The social worker made investigations and found that the child's father, who was 23 years of age, was in prison and her mother, aged 21, was working as a domestic, paying board for her younger child, aged two, who was living with his aunt. This aunt had four children of her own, was quite poor, and lived in a very small tenement.

Obviously, a delicate child, just recovering from a serious operation, could not be sent into such a destitute home. The Social Service Department arranged for her admission to a convalescent home. Here she stayed for a year, after which she was in such good condition that arrangement was made to send her to the country for the summer, with her small brother (who was also in need of fresh air and good food) so that the children might be together. The mother, out of her earnings, paid for the little boy.

In the meantime the Social Service Department communicated with the Prison Association, in order to be able to find out about the father and to make plans for the family. The report was that he had a good record, and that they felt he would try to make good when his term of imprisonment was over: he was discharged a few months later. The improvement in the child's condition made him more anxious than ever to earn enough to give his family a decent home. He secured a regular job as housepainter, and before long a suitable home was found in which the child could be kept well and strong.

If we think for a moment of what would have happened in this case, without the aid of Social Service, we realize its value. The little girl in all probability would have gone back to her aunt's home, where, with poor food and lack of proper care, the tuberculous condition of the bone would have inevitably returned. She would have been sent back to the hospital, which would have thus lost all the advantage of the surgical skill and the months of care that had been given to her, and would have had the added expense of her relapse,

in which all care, no matter how skilful, would be unavailing. The father, discouraged by the miserable condition of his family, would have lacked the incentive to make good, which the unexpected good health and cheerful condition of his family gave him.

Through this work of the Social Service Department the child, the family and the hospital were all benefited, and all this was accomplished, not through the expenditure of any money for relief, but because the hospital could turn this case over to highly trained workers, who understood both the medical and social sides of the problem, and so could solve it successfully. Unfortunately, all cases cannot be brought to the same satisfactory conclusion.

It is, however, in the practice of psychiatry that the most highly specialized form of social work is needed. It bears the same relationship to medical social work as the specialist in psychiatry bears to the general practitioner in medicine. The numbers of people whose physical difficulties are based on nervous and mental conditions, as well as the very special and intricate nature of the conditions, make it necessary to specialize in psychiatry. Similarly the large number of persons whose difficulties, both medical and social, are of this kind, and the very intricate nature of these difficulties, make it necessary that there be specially prepared and trained workers to assist and complement the psychiatrist in treating these patients.

Because of the environmental and social factors involved in most cases of nervous and mental disease, the psychiatrist is probably more dependent upon the social worker than is ordinarily the case, and it is, therefore, most important that she have a clear understanding of the special medical problems involved, and their relation to environment.

The most successful and the most important work of the psychiatric social worker is with children. In adults suffering from mental and nervous disorders, social treatment can, in most cases, only alleviate the condition, and no definite cure can be effected; but with children it is different. They, in their formative years, are dependent members of a family group, and not only are they utterly at the mercy of their surroundings and personal treatment, but also most susceptible to them.

If the difficulties of many problem children had had early recognition and better understanding, and their physical and mental environment been readjusted, much truancy and delinquency might have been prevented and the child been given a better chance to develop normally. Hence the need for

educating parents in attempting to understand and to deal sympathetically with the difficulties of the problem child.

The task of altering social relationships and social behaviour is one of great responsibility. It can readily be seen that a certain definite basis for the selection of students in all forms of social work is desirable. Special personal qualifications are obviously necessary. They may be said to include a well-balanced personality, a special interest in individuals as individuals, tact, resourcefulness, the ability to think clearly, patience and the objective habit of mind. The educational standard required would be that of matriculation or the leaving certificate.

The academic course would need to include, as being of the greatest importance, the study of ethics and general and applied psychology, as these form the basis of all practical social work, and without the knowledge of them and full appreciation of their value, no social work can be efficiently done. Economics, including the care of dependents, and the control of poverty, besides hygiene (public and industrial), and a course in social institutions would also be included in the curriculum and ample provision be made for the application of these in field-work and case-work.

When once the value of trained social workers is realized, for administrative positions as well as in the field, the demand for their services will be increased and practical application of the study of the social sciences will be found for students in social work.

REASONING AND RATIONALIZATION.

By RALPH PIDDINGTON,
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PART I.—GENERAL ASSUMPTIONS.

BEFORE commencing a discussion on reasoning and rationalization, I think it necessary to postulate certain general assumptions for purposes of argument. The truth of these assumptions may be questioned, and, if they are not true, the conclusions which I reach will be largely overthrown. Nevertheless, I do not see how one may proceed in this matter without at least the following working hypotheses:

1. The "philosophical theory" view of knowledge which states that "the objective is independent of our consciousness in the sense that it is what we are constrained to think in order to make our consciousness consistent with itself. What we are constrained to think is not confined, in its *reference*, to our thought, or to thought at all." (Bosanquet: *Essentials of Logic*, p. 13). This is tantamount to an affirmation that there are certain criteria to which our thought must conform. Without some such assumption, scientific psychology cannot very well proceed.

2. The doctrine of evolution, which states that all complex living structure has originated by a process of gradual change from something more simple according to certain definite laws. This involves the assumption that, for some reason or other, all living matter shows the remarkable feature of "will" (in the broad sense) or *élan vital* by which it strives for certain ends which are beneficial to the perpetuation of life and feels satisfaction or dissatisfaction according to whether these ends are attained or not. Indeed, this is the differentia of the species "living matter" of the genus matter. The process of evolution has marked a growth in the efficiency of the mechanism with which ends are sought either by inheritance of acquired characteristics, or by spontaneous variation plus natural selection, or by a combination of these two. We must, I think, postulate rudimentary mind or consciousness in even the lowest forms of life since they seem to experience feeling, which is essentially a mental function. Indeed, it is probable that life first originated in feeling, a blind striving for satisfaction. All the elaborate superstructure of intelligence and emotion is merely a clarification and specialization of the meanings of objects in their relations

to this elemental desire for satisfaction. Mind or consciousness is, then, essentially an "awareness of worthwhileness," a recognition of value which is immediate and accompanied by some form of feeling. The mind of the organism is essentially a unity, though made in such a way as to respond to varying stimuli; when two stimuli provoking antagonistic reactions are simultaneously applied, contradictory tendencies to action are generated within an organism which is a unity and we have the beginnings of conflict.

During the process of evolution the mind has become highly specialized both from the emotional point of view and on the side of intelligence. The scale of values and the manner of seeking satisfaction have become immensely complicated; various specializations of reaction have given rise to the instincts, which have in turn been combined to form sentiments such as the self-regarding sentiment which constitutes the emotional aspect of self-consciousness. The acquisition of self-consciousness has given an immensely widened scale of values which now come to have a fuller meaning than ever before. The concept of the unity of the organism finds its fullest development in the unified personality which seeks a permanent unity and not merely momentary freedom from conflict.

The evolutionary concept, though indispensable in any discussion such as the present, has produced many fallacious arguments. It does not follow, because the brain of man can be shown to have evolved from some such structure as the great ganglion of an earthworm, that the human brain is "nothing more" than a great ganglion. Similarly, one cannot say that a unified personality is "nothing more" than the principle of the unity of organism. Such things as moral values, though they have their origin in primitive instincts, have none the less an independent existence and an independent meaning. But the fullness of this meaning is not seen unless origins are considered and it is realized that morality, whatever its ultimate value and ethical meaning, is merely a different and highly specialized impulse and must be content to strive on equal terms with other impulses for mastery of the individual.

3. Psychological determinism is essential to any scientific study of mental phenomena, since it is nothing more than the law of sufficient reason applied to psychology.

The metaphysical controversy on free will and determinism is for the moment irrelevant.

4. Some theory of psycho-physical interaction will be found indispensable to a discussion of rationalization.

PART II.—BELIEF AND DOUBT.

Before considering reasoning, it is essential to give some thought to the nature of belief and doubt. It is extremely difficult to analyse the subjective feeling of belief for it is something *sui generis*; according to James, it is a "sort of feeling more allied to the emotions than anything else"; Bagehot, indeed, speaks of an "emotion of conviction." This is, I think, a *post hoc ergo propter hoc* argument. When we believe in a thing we usually feel some emotion on account of the thing's relations to our life; at the very least we assimilate the belief as part of our self and feel a certain emotion of elation (in McDougall's sense) in asserting that which we regard and speak of as "our belief." In addition, there is always probably some satisfaction of the instinct of curiosity. Thus, the act of believing is always accompanied by some affective state, but this does not render belief, *qua* belief, affective. Indeed, there is no emotional or quasi-emotional process experienced during belief which we could not, under appropriate circumstances, experience independently of the act of believing. Counsel become heated in court while maintaining a view which they do not really hold and, to use James's classic example, the Russian lady weeps at the misfortunes of the characters in a play while her coachman freezes on his box outside. James would put a different construction, which I shall discuss later, on these cases; but to me they seem to show that the mere act of believing is something quite removed from its attendant emotions and corresponds to the abstraction of mere cognition as revealed in man's consciousness. McDougall rightly restricts the term "belief" to a process of the developed mind; he writes: "The dog who recognizes his master, or the young child who recognizes his father and promptly greets him, cannot properly be said to believe that the approaching figure is his master (or father)"—(Outline of Psychology, p. 363). This distinction is made clear by Bosanquet when he writes of the animal's world: "The present is not interpreted, enlarged and arranged with reference to what is not present in time or space as it is by us" (Essentials of Logic, p. 6).

The distinction between belief and mere confidence is fundamental to any discussion of reasoning. A similar distinction must be drawn between doubt and hesitation, which is merely a conflict of impulses; doubt is psychologically the antithesis of belief and in its essential nature shares the same unemotional quality; it represents the simultaneous cognition of two incompatible facts; were we not creatures possessed of an essentially three-sided consciousness we should

be content merely to know the facts, but, endowed as we are with an instinct of curiosity and also a self-regarding sentiment which causes us to aspire to the status of enlightened individuals, we never experience doubt without some attendant emotion. The purely cognitive nature of doubt is seen when we contemplate a primitive but fully self-conscious mind face to face with a problem of purely theoretical interest. Such a situation is revealed in a letter quoted by James on page 640 of his "Principles of Psychology"; the letter, which is too long to quote in full, was written by a Turkish *cadi* to an English traveller who asked for information; its spirit is summed up in the following extract: "As to the previous history of the city . . . it were unprofitable for us to inquire into it." Surely we may call this doubt; the writer is fully aware of the existence of a problem as to previous history of the city, although, apparently he feels the minimum of emotion in relation to it.

I cannot agree with McDougall when he writes: "If you are not interested . . . in the identity of the approaching figure you neither believe nor doubt nor disbelieve." This view comes, I think, from a confusion between belief and attention. If a certain object possesses an intense emotional significance it monopolizes attention, and by a process which will be discussed under rationalization, may even stimulate belief. But the latter is admittedly an abnormal phenomenon; it is generally admitted that the truth of any given proposition (the extent of our belief in it) should obey the rules of logic independently of our individual emotions. When we are interested in an object we say that it has "more reality"; what we really mean is that we probably perceive more of the object's relations and pay more attention to them. James and McDougall would contend that if we had no emotional interest we should perceive no relations at all, which is a nice point, and involves the question of mere cognition. Does cognition *necessarily* imply affection and conation? I think not, although we invariably find them associated.

The most cogent argument for the purely cognitive nature of belief is that belief does not vary in proportion to emotional interest. It would be difficult to find a man who believed more strongly in the immortality of the soul than in the equality of the angles at the base of an isosceles triangle. Belief or judgment being "the reference of an ideal content to reality" (Bosanquet), is determined by the extent to which the thing believed does not clash with any other thing believed. "Any object which remains uncontradicted is *ipso facto* believed and posited as absolute reality" (James).

James points out the existence of many worlds; and by this means he would explain the cases of the counsel arguing a legal point which he did not "believe in" and the weeping Russian lady. For example, in the latter case he would say the characters in the play have for the Russian lady a real existence in a "play-world." But this world is never referred to reality; this would be seen in the difference of reaction if an actor produced a revolver and began to shoot with it and if a gentleman in the audience did the same thing. Nevertheless, it is true that each of us possesses a number of worlds, but in the well-ordered mind, only one is referred to absolute reality.

But even what is disbelieved has an existence in the world of error for the philosopher. The popular mind possesses a number of worlds (such as the worlds of sense, of "idols of the tribe," of the supernatural, etc.), which it never tries to reconcile with each other. Here we have the beginnings of dissociation, where phenomena which have existence only in an imaginary world, are definitely referred to reality. To each individual there is one world which is supreme and this is usually the world of sense, especially the sense of touch, for this comes nearer to us than any other. Hence we regard our sense of touch as the supreme arbiter in all questions of reality or unreality. But it does not follow that this applies to everyone; for the mystic the world of the supernatural is probably the supreme reality. In order to avoid a discussion on the problem of knowledge, I think we must simply say that for us the world of the objective ("what we are constrained to think") constitutes reality, though this is little more than a truism. Having come to a conclusion as to the nature of belief and doubt, let us turn to the consideration of reasoning.

PART III.—REASONING.

Reasoning is essentially a process by which, by the use of something already believed, we come to believe a new thing independently of sense-perception. When we call man a rational animal we mean that he is capable of reason, not that his sole mode of adjusting himself to his environment is rational.

The evolution of reason has been the means by which man has reached his present high status in the animal world. All biologists agree that the only test of evolutionary status is the ability of the organism to adjust itself to its environment. In the articulate phylum we see organisms whose conduct is determined by highly specialized instinctive mechanisms, but which are quite incapable of modifying their conduct by

previous experience. When we turn to the vertebrate phylum we find a scale running from the lowest vertebrates to man with an ever increasing proportion of behaviour modified by experience. But in man we find an altogether new mental phenomenon which we may call an ability to be conscious of situations not present to the senses. Herein lies the difference between the brute and human mind; whereas the animal is capable of modifying its conduct by situations which have previously been experienced, man can adjust himself to new situations by the use of his previously acquired knowledge. This growth of reason from mere association has been an evolutionary process, and it is impossible to draw any sharp line between the two. In this connection McDougall writes (Outline of Psychology, p. 414):

“The many levels of explicitness of reasoning may be illustrated by another quasi-historical incident. When the dove returned to the ark bearing a leafy twig, we may fairly suppose that his appearance provoked the following reactions: The ox lowed in vague anticipation of green fodder; the elephant lifted up his trunk and sniffed in all directions; the apes chattered excitedly and keenly scanned the horizon. Ham said: ‘Well, I never; wherever did he get that?’ Shem said: ‘I guess he’s found a tree somewhere.’ Japhet said: ‘Now we sha’n’t be long.’ Mrs. Noah said: ‘Heaven be thanked! Those are young leaves, only just sprouted. I don’t mind admitting now that I’m sick and tired of this dirty old ark.’ And Noah: ‘My children, the Lord has completed His work, the wicked are destroyed. Let us praise the Lord, and then make ready to disembark the animals.’” Who shall say at which point in this scale of increasing explicitness we should recognize reasoning?

I shall follow James in regarding the ability to meet a novel situation as the differentia of reasoning as opposed to mere association. This involves the passage from association by temporal contiguity to association by similarity. McDougall contends (Physiological Psychology, p. 135) that all associations including association by similarity are but varieties of association by temporal contiguity. I admit that no association can be formed without temporal contiguity either in reality or in thought, but I suggest that association by similarity is such a refined form of association by temporal contiguity that it transcends mere time. Of course there is some association by similarity in all association by contiguity, and *vice versa*; but I think we can distinguish two separate species of association in which contiguity and similarity respectively predominate.

The difference between association by contiguity and association by similarity lies in the fact that the former picks out a particular aspect of a situation whereas the latter treats the situation as a whole. An illustration will perhaps help to make this clear. I am visiting the house of a friend with my dog, who is accustomed to being fed at the sound of the dinner bell. My friend has a musical gong instead of a bell, and the sounding of this will at once tell me that dinner is ready, though my dog will remain unaffected. To me the association is one of similarity—the “clanging sound” aspect of the situation “dinner-bell ringing” has become the associative link which enables me to know that dinner is ready when I hear a strange “clanging sound.” For my dog, however, the total situation “dinner-bell ringing” is the only stimulus which can evoke the appropriate response. But notice that the difference is essentially one of degree; if the gong is sufficiently like the accustomed bell, my dog will recognize the “similarity”; yet if it is dissimilar enough, I may possibly mistake it for the chimes of a grandfather clock. But this difference, between mere contiguity and similarity, though fundamentally only one of degree, is of extreme importance, since it constitutes the essential difference between the mental endowments of the brute, the ordinary man, and the genius. It takes but little consideration to see that here lies the difference between the mind of a Newton, who could see the similarity between “a falling apple and a falling moon,” and the cramped intellect of the country magistrate who acquitted a man charged with stealing boots “because,” said his worship, “I can find no mention of boots in the list of punishable offences.”

When association by similarity becomes explicit we have reasoning; here, again, it is very hard to draw any hard and fast line of demarcation.

In the case of the dinner-bell cited above, I may formulate my thought in the form of a syllogism:

All clanging sounds at meal-time mean dinner. This noise is a clanging sound at meal-time. Therefore this noise means dinner.

On the other hand, I may merely perceive the similarity and react, in which case the process involves merely what Dr. Romanes calls a “recept.” He writes (*Mental Evolution of Man*, p. 50):

“It requires but a slight analysis of our ordinary mental processes to prove that all our simpler ideas are group-arrangements which have been formed spontaneously or without any of that intentionally comparing, sifting, and comb-

ing process which is required in the higher departments of ideational activity. The comparing, sifting, and combining is done here, as it were, for the conscious agent, not by him. Recepts are received; it is only concepts that require to be conceived. . . . If I am crossing a street and hear behind me a sudden shout, I do not require to wait in order to predicate to myself that there is probably a hansom-cab just about to run me down; a cry of this kind, and in those circumstances, is so intimately associated in my mind with its purpose, that the idea which it arouses need not rise above the level of a recept; and the adaptive movements on my part which that idea immediately prompts are performed without any intelligent reflection. Yet, on the other hand, they are neither reflex actions nor instinctive actions; they are what may be termed receptual actions, or actions depending on receipts."

I would prefer to call such processes associations, either by contiguity or similarity as the case may be, but terminology is unimportant. The important point to realize is that reasoning is merely association by similarity made explicit, *i.e.*, raised from the "receptual" to the "conceptual" plane. In reasoning we pick out *essential* similarities according to our requirements for the moment. James has shown that the only meaning of essence is teleological (*Principles of Psychology*, Vol. II, p. 335) and that in reasoning we emphasize that aspect of an object (which has an infinity of aspects) which is most helpful to our purposes.

A bottle is just so much glass to the chemist, a messenger to the shipwrecked traveller, a refuge from care to the drunkard and a weapon to the larrikin. Each picks out that aspect which is in tune with his purposes, and sees the total bottle as but a species of a genus. Whatever aspect is taken bears the meaning of the whole; to the larrikin the message-carrying or liquid-containing aspects of the bottle are neglected; it is plainly and simply a weapon.

Reasoning may be divided into two processes: First we extract a certain quality from an object and allow that quality to stand for the whole, *i.e.*, the quality is for us at the time the object's "essence." Secondly, we notice that this quality suggests possibilities which were not apparent when we considered the object as a whole.

It is not to be thought that because reason is always founded on some affective process, it is on that account an essentially vital function. It has been said that the qualities from which we infer are teleologically determined, but it does not follow that the inference itself is affective. Although

reason is always revealed in conjunction with affective processes operating in order to attain the ends of these processes, yet it is itself essentially a non-affective and hence non-vital process. Only the schoolboy can judge that the best thing to do with the numbers 145 and 3,694 is to multiply them together, since he has been told to do so, and will be punished if he does not, but the calculating machine can make the necessary calculations just as effectively.

We see, then, that reasoning is not divided by a sharp line from association by similarity and that the latter is hard to distinguish clearly from association by mere contiguity. Thus we find an unbroken line from the conditional reflexes of the lowest vertebrates to the highest achievements of men's intellect.

PART IV.—RATIONALIZATION.

It is very necessary to note that a large amount of our thinking is not reasoning though it may be equally effective. We must beware lest by introspection we read into our consciousness an explicitness which it does not, under normal conditions, possess. Indeed, most of our behaviour is determined by reflex and instinctive processes, by secondarily automatic reactions, and by associations of various kinds; as James says (*Principles of Psychology*, p. 325): "Much of our thinking consists of trains of images suggested by one another, of a sort of spontaneous reverie of which it seems likely enough that the higher brutes should be capable. This sort of thinking leads nevertheless to rational conclusions both practical and theoretical. The links between the terms are either 'contiguity' or 'similarity' and with a mixture of both these things we can hardly be very incoherent." Indeed this type of thought may be most fruitful; Mr. Alfred Sidgwick writes (see McDougall, *Outline of Psychology*, p. 406): "In ordinary life and in science we normally suspect a truth before we prove it; our reasonings lag behind our guesses and are an attempt to review the grounds of a belief which has already begun to take shape." It is only at certain times that we are *fully* conscious, that we think rationally and make our thought more or less explicit. In order to explain this we must, I think, call to our aid the theory of psychophysical interaction.

From the neurological point of view the most explicit reasoning processes take place in association centres of the cerebral cortex, which are, both phylogenetically and ontogenetically the latest parts of the nervous system to develop. Hence they are not firmly established and are easily destroyed;

but they constitute the most important element in the life of the individual. In addition to the association centres of the cerebral cortex there are the projection centres which unite the cortex with the lower levels of the nervous system by means of efferent and afferent paths. Thus the nervous system as a whole constitutes the means by which the individual adjusts himself to his environment. The relation of mind or consciousness to the nervous system is very difficult to determine. We have been accustomed to say that consciousness is that of which we are aware and that all other nervous processes are mere reaction. But the anomalous thing is that the lower reactions show a certain co-ordination, a certain purpose. For example, a decerebrate frog will raise his leg to scratch a point of irritation on his back; if the nearest leg be held the other leg will attempt to scratch the place.

It is the functioning of the lower centres of the nervous system which gives rise to reactions of which consciousness is not directly aware, and which psycho-analysis would refer to "the unconscious." We are thus driven to the conclusion that consciousness itself is a purely relative term; we cannot accept the psycho-analytic doctrine of two separate compartments of mind; at the same time we cannot regard consciousness as a function altogether independent of influences from without. Let us adopt as a working hypothesis the theory that consciousness is a sort of pyramid, the apex being the critical personality superposed on a substructure of instinctive and quasi-instinctive mechanisms. On the physiological side we have the cortex, the organ of "critical consciousness," placed over the lower levels of instinctive and reflex action. This conception demands an elaboration of the theory of value discussed in Part I; how are we to determine the value of situations (I use the word "situation" to denote any complex of impressions which has value, either positive or negative, for the individual) to man? The view that those situations which conform to certain ethical and æsthetic norms are of most "value," though undoubtedly true when the relation of the individual to the life of the species is considered, are not true from the purely scientific point of view of psychology. Here the only criterion of value is ability to stimulate the nervous system to reaction. Considering the nervous system as a whole we must extend the conception of facilitation and inhibition. While a certain stimulus or complex of stimuli are evoking a certain response, no nervous arcs incompatible with that response are allowed to function (inhibition), while all nervous pathways which do

conduce to the response are helped to activity by facilitation. In terms of consciousness only one situation can have value at the one time, and all incongruent ones *ipso facto* lose value. This is the fundamental nature of rationalization.

It will be seen that in adopting this view I am taking a much wider conception of rationalization than is generally held. Moral rationalization is by far the most common form, for our moral sense is in the nature of a sentiment and may be brought into play at any time for the purpose of considering any of our acts. Yet I think rationalization extends beyond morality; I propose to define it as "a process by which, on account of the superior value of an incompatible tendency, any situation suffers a loss of value as a determinant of thought or conduct." The simplest form of rationalization consists of the degrading of the importance of that which we cannot attain. The fox in the Æsop fable really thought the grapes were sour. This was an aspect which had perhaps not occurred to him before; thus we are driven back to James's conception of the teleological determination of which aspect of an object is to be considered as a basis for inference. Although a true inference is eternally true, the values attached to objects are fickle as the wind. Let us assume for the purposes of argument that the fox *did* notice a greenish look about the grapes which seemed to indicate sourness; while trying to reach them his view of the situation would run as follows: "They look sour, but I'm very hungry." After failure he probably turned away saying: "I am hungry, but the grapes look very sour." The important thing is the place occupied by such words as "but" and "very."

All rationalizations then are of this fundamental type. The value of the situation may be so great as completely to inhibit even incompatible sensory impressions, in which case we get hallucination. Just how far reality will be distorted is a matter of the individual mental make-up. It is probable that everyone, except in the most extreme cases of dissociation, is to some extent restrained by necessary truths. Rationalization, as I have tried to show, is more a matter of the direction of attention, of distortion of emphasis, than anything else. If a normal person is shown the fallacy in a certain rationalization he may possibly admit himself in the wrong. Moreover, many persons will refrain from doing a thing which they regard as wrong until a rationalization, which they consider an adequate "reason," presents itself. For example, an elderly lady who was rather poor came to possess an expired ferry season ticket which, however, was identical in shape with the type in use at the time; there

was thus no fear of detection. But the lady was restrained by moral considerations. The result was a constant moral battle and, although she frequently used the ticket, she just as often refrained from doing so and paid her way. One day a wounded soldier dropped some money on the wharf without noticing that he had done so and the lady was able, by hurrying through the subscribers' gate, to return the money to the soldier before he was lost in the crowd. Being especially interested in war work she was very pleased to be able to do this, and the incident removed her antagonistic feeling towards the season ticket which she used thereafter without any qualms of conscience. We see here how she was, to a very great extent, restrained by a recognition of reality, otherwise she would have fallen back on the conventional rationalization that a company or the government is, for purposes of cheating, not the same as an individual. But she had to wait till an incident occurred which came close enough to her interests to provide an adequate rationalization. This case also illustrates the lack of discrimination and judgment which characterizes most rationalizations. The person in question did not see that to use the ticket on that one occasion was, perhaps, justifiable, but did not affect the moral issue of its use at other times. The total situation of "using the ticket" came to have a positive instead of a negative value.

Thus we see that reasoning differs from rationalization in that it is essentially an intellectual function; though the grounds for inference (the aspects of an object attended to) are teleologically determined, the inference itself is quite mechanical. The conclusion follows automatically from the premises. Rationalization on the other hand postulates feeling, a multiplicity of tendencies all striving for mastery, but of which only one can be dominant at the one time. Therefore, since we desire unity and continuity of personality, we seek, by picking out only those aspects which harmonize with our personality, to render actions, done under the influence of a foreign impulse, as compatible as possible with our moral and other aspirations.

Dr. Morgan (*Psychology of the Unadjusted School Child*) gives a very good analysis of the ontogenic development of rationalization. He points out the harm arising from a violent condemnation of the emotional life; children should do what they want, provided it is right, without being called upon to invent excuses; this constant demand for excuses and "reasons" on the part of parents and teachers fosters rationalization. He emphasizes the fact that reason is not infallible and, as we are liable to reach wrong conclusions

when we are reasoning disinterestedly, it is not surprising that we reach wrong conclusions when our whole being is trying to reach them. Reason has to fight its way through structure; the characteristic endowment of man is his reasoning ability; the extent to which he uses it to weld his impulses into a harmonious personality determines his degree of removal from the animals; but one must beware of one's biological past, bearing in mind the words of McDougall:¹

"But the truth is that men are moved by a variety of impulses whose nature has been determined through long ages of the evolutionary process without reference to the life of men in civilized societies; and the psychological problem we have to solve is—how can we account for the fact that men so moved ever do come to act as they ought, or morally and reasonably?"

¹ "Social Psychology," p. 10.

SUMMARIZED REPORT OF DISTRIBUTIONS AND INTER-CORRELATIONS OF BINET AND PERFORMANCE TEST-VALUES OBTAINED FROM SUBNORMAL CHILDREN IN A MENTAL SURVEY.

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I.

THOUGH the examining work of a Psychological Clinic assumes a distinctively individual character, yet it is necessary from time to time to take a mass view, and summarize the results of the various measurements. This is particularly desirable where a psychological clinic undertakes the task of ascertaining and certifying mental defectives. The examinations for this purpose are clinical. But in order that the mental level of an individual may be determined and compared with that of other members of his own grade and type, the use of standardized mental tests is indispensable. Accordingly it is of some service to make known the mental measurements of subnormal Australian children so that investigators in the same field may obtain comparative data.

In this report we shall first of all indicate generally the mental status of the various classes which have come under review, and then proceed to a discussion of the value of performance tests for mental classification of subnormal and feeble-minded children. So far as this latter phase is concerned, we regret that more extensive plans were not considered so that a complete survey would have been possible. Owing to the heavy burden of the work of tabulation and statistical treatment, we have rather made use of what material was ready to hand than undertaken fresh tabulations from the beginning. In the light of further experience the data will be reinvestigated.

The usual procedure of the psychological division of the examination includes the Stanford-Binet scale as a preliminary, followed by the Porteus Maze tests and other performance tests, such as the Healy A, Healy (pictorial completion) I, mare and foal, Seguin form board, Woodworth-Wells substitution and association tests, Kent-Rosanoff association, Knox cubes, Healy learning and cross-line tests, as well as others similar to those listed in the Pintner-Paterson scale, etc.

BINET DISTRIBUTIONS.

A general view of the mental standing of the individuals who are ordinarily met with in the clinic, is presented by the following classified list of 736 consecutive examinees (including a sprinkling of adults), *viz.*: Idiots, 5; imbeciles, 44; feeble-minded, 214; diagnosis deferred, 93 (most of whom on re-examination have been advanced in status); borderline (or very backward), 205; normal inferior, 126; normal average, 47; normal superior, 2. Some of the borderlines might at adulthood be classified as inferior normals.

The distribution of the intelligence quotients (Stanford-Binet) is here shown in terms of quartiles for each mental level.

				Q ₁ .	Median.	Q ₃ .
Whole Number	..	..	..	57	66	72
Imbeciles	..	..	..	31	36	39
Feeble-minded	..	..	..	52	56	60
Diagnosis deferred	..	..	..	62	67	70
Borderline	..	..	..	63	67	70
Normal inferior	..	..	..	75	79	85

It is apparent that in mental development the individuals referred to the clinic for examination are (taken as a class or group) much below the level of the average of the community. In fact they comprise mainly retarded children from the schools, as well as others in charitable and correctional institutions.

From the distribution it will be seen that the I.Q. of itself is not sufficient to determine mental defectives. But this does not mean that it is not serviceable in individual diagnosis or classification. It enables us tentatively to place individuals on an intelligence scale. Terman⁽¹⁾ himself has made it quite clear that his I.Q. classification is not to be regarded as "marking off well-differentiated groups"; he intended it to be no more than "a rough tentative classification." In clinical valuation all sorts of other data are required for diagnosis, and in determining certifiable cases of high grade mental deficiency, social and vocational inefficiency is an essential criterion as laid down in legal definitions. As to the concept of mental deficiency, we must distinguish between scientific (or psychological) differentiation of mental levels from legal requirements which more directly concern the

social, moral, and industrial standing of the individuals who are to be classified.

The frequency distributions of the chronological and mental ages of the whole group of the 736 cases and of the subgroups at each mental level, have been tabulated. As similar tables have often been published, they are not reproduced here. But it is interesting to note that although the chronological ages for each mental level subgroup range from four years of age to adult years, and are in each instance "widespread" in their distributions, yet, with the exception of average normals, the distributions of the mental ages at each of the mental levels conform more or less to the normal frequency curve, and even the more so as we descend the scale of mental levels from inferior normals to imbeciles. This is due to the early arrest of mental development characteristic of subnormal intelligences. Observing the graphs of the distributions of the chronological and the mental ages at each mental level, we note that their respective curves at the imbecile level just meet one another (the one begins where the other ends); but as we advance from the subnormal to normal levels, we find that the chronological and the mental age curves more and more overlap, until at the normal average level the lines of the curves closely follow one another throughout.

Of the total number (736), there are 428 children of chronological ages between $9\frac{1}{2}$ years and $13\frac{1}{2}$ years distributed as follows: $9\frac{1}{2}$ years, 64; $10\frac{1}{2}$ years, 105; $11\frac{1}{2}$ years, 87; $12\frac{1}{2}$ years, 101; $13\frac{1}{2}$ years, 71. The quartile ranges of variability of Binet mental ages for each year are here indicated:

	$9\frac{1}{2}$ Years.	$10\frac{1}{2}$ Years.	$11\frac{1}{2}$ Years.	$12\frac{1}{2}$ Years.	$13\frac{1}{2}$ Years.
Q_1	6.3	6.6	7.3	7.5	7.4
Median	7.0	7.3	8.2	8.4	9.3
Q_3	7.8	8.3	8.9	9.1	10.1
Standard deviation ..	1.14	1.24	1.25	1.20	1.47

With the exception of the $13\frac{1}{2}$ years group, the range of the quartiles is practically the same in all instances, and there is a whole year's advance in mental age for a two years' variation of the age group.

This similarity in overlap or interquartile range of mental ages of subnormal children from $9\frac{1}{2}$ to $12\frac{1}{2}$ years contrasts somewhat with what has been reported by other investigators

concerning unselected *normal* children from 6 to 12 years of age.⁽²⁾ In the case of the latter, it is found that the overlap of mental ages for each succeeding chronological year increases gradually with advance of age. The similarity in overlap in this group of 428 cases also shows itself in a smaller number (274) of the same group. It also occurs in another group of 210 cases (to be referred to later on) of which 64 are not included in these earlier groups.

As these age groups are distinctly subnormal in mental development, it would be expected that the correlation between the chronological ages of all the groups of these 428 children and their mental ages would be fairly low. The coefficient of this correlation (*r*) is 0.45.

CONSTANCY OF I.Q. (BINET).

Re-tests have been made in the case of 144 individuals. They include 87 feeble-minded, 18 deferred diagnosis, 30 border-lines, and 9 normals. With the exception of 9 adults these individuals are children under 17 years of age. The intervals of re-tests vary from six months to three years. The results are summarized as follows:

Variation.	Number.	Per cent.
Zero	23	15.9
1-5 points ..	97	67.3
6-10 points ..	20	13.9
11-15 points ..	4	2.8
Total	144	

The correlation between the two series of examinations is 0.94. If a variation of ± 5 points be regarded as a reasonable limit of constancy, then over 83% of the cases show a constancy of I.Q. The average difference in I.Q. between first and second tests is 3 points. In the feeble-minded cases the percentage of constancy of I.Q. is 85%. It might be mentioned that very few of these feeble-minded individuals are custodial cases. In the few instances where the variations of I.Q. exceed 10 points, there are special reasons to account for the differences, such as removal of emotional disturbance, response to encouragement in treatment, or the reverse.

Of the total actual variations there are 54 instances of gain in I.Q. and 67 instances of loss. Beyond ± 5 points, the number of gains is 10 and of loss 14. Of the feeble-minded

individuals there are 30 cases of actual gain and 40 cases of actual loss. While the losses do exceed the gains (a phenomenon characteristic of subnormals, and particularly of the feeble-minded), yet the difference between the numbers of gains and of losses is not so large in this group of individuals as in the case of others that have been reported on.⁽³⁾

COMPARISON OF DISTRIBUTIONS OF BINET AND PORTEUS AND OF OTHER PERFORMANCE TESTS.

The distribution of 405 individuals in terms of mental ages, determined by Binet and Porteus scales, have been tabulated. The quartiles of the intelligence quotients (Binet and Porteus) are:

	Q ₁		Median.		Q ₃	
	B.	P.	B.	P.	B.	P.
Whole	58	62	64	74	70	87
Feeble-minded	53	52	58	61	63	70
Deferred	59	67	64	79	68	88
Borderline	65	74	68	83	70	90
Normal inferior	74	85	77	92	82	99

Referring to this table, we note that for each mental level sub-group, and for the whole group, the median of the Porteus I.Q.'s exceeds that of the Binet. The difference is least for the feeble-minded and the deferred. On the other hand the feeble-minded have a wider range of variability both for Binet and Porteus I.Q.'s. And further the interquartile range of the Porteus is almost double that of the Binet.

Of these 405 combined Binet-Porteus cases, there are 274 between 9½ years and 13½ years, distributed as follows: 9½ years, 32; 10½ years, 68; 11½ years, 52; 12½ years, 73; 13½ years, 49. The medians of the mental ages and the intelligence quotients (both Binet and Porteus) for each chronological age are:

Years.	Median Mental Age.		Standard Deviation (Binet M.A.)	Median I.Q.'s.	
	B.	P.		B.	P.
9½	7.0	7.7	0.86	73	81
10½	7.2	8.0	0.89	68	76
11½	8.1	9.0	0.89	70	78
12½	8.2	9.7	0.95	65	77
13½	9.2	11.0	1.21	68	82

It will be seen that of this particular group of 274 cases the medians of the Binet mental ages correspond fairly well with the Binet age medians of the larger group of 428 cases (already referred to), from which they have been taken. And it is also worth noting that in this group the chronological ages, showing the most marked yearly variations in Binet mental ages, also show fairly similar variations in Porteus mental ages, and that the variations in range between Binet and Porteus mental ages and I.Q.'s increase considerably at the pubescent years as compared with the prepubescent years. These variations seem to indicate that (other features apart) ability to use language mechanisms, particularly with subnormal children, undergoes an earlier "arrestment" than ability to handle concrete problems not requiring intricate verbal explanations. Anyone who is constantly testing children both in language and non-language tests becomes more and more impressed with Terman's view that intelligence (particularly as exemplified in the reactions of normal children) increases in proportion to the individual's ability to carry on abstract thinking.

The mental age period when this difference becomes most marked is round about nine to ten years, which is usually regarded (in terms of mental ages) the extreme upper limit of adolescent or adult feeble-minded intelligences. In subnormal individuals there are conspicuous defects in reasoning ability. They almost invariably adopt hit or miss methods of attacking problems or doing tasks, and they usually succeed better where there is some lead or other guiding sign. But when they must first of all work out the principle or plan of the thing, or be on the look out for it, as the situation is being met or analysed, they generally fail. Of course, there are the special cases where chance or happy intuition brings them to the goal; but this success will not be uniformly sustained. We frequently find that in performance tests, where "reasoning," or apperceptive functionings, are demanded, the median mental ages correspond more closely with the Binet than other performance or practical tests, where there is some guiding sign or other means of direction clearly indicated. But generally on performance or practical tests they are likely to go beyond the limits of their Binet mental age.

When we plot and compare the curves of distribution of the Binet and Porteus mental ages of individuals, classed according to mental levels, we find interesting differences between them which are somewhat constant for each mental level. With the exception of the normal levels where the lines of the curves of distribution closely follow one another,

the general tendency is that, whereas the Binet curves for subnormal mental levels conform fairly well with the normal frequency or bell-shaped curve, the Porteus curves for these same levels rise and fall like a succession of plateaux, and extend themselves much beyond the upper limits of the Binet curves after the manner of the lines of distribution of the chronological ages. These differences are even more accentuated in the curves representing the intelligence quotients determined by both scales. If the chronological age remains constant, we still find these differences featuring for each age group. They are indicated for each of the age groups from $9\frac{1}{2}$ years to $13\frac{1}{2}$ years. On comparing the records for other performance tests, such as the Seguin form board, Healy A, Healy I, mare and foal, Knox cubes, etc., similar features appear.

According to the mental ages given by Pintner-Paterson, it is found that the medians for some 350 Tasmanian subnormals are, on the average, lower than the medians for normals to the following extent: For Seguin and Knox cubes, 3 years; mare and foal, 3 to 4 years; Healy A and Healy I, 4 to 5 years. The falling back tends to increase with advance of age. It is of interest to record the percentage of cases on and above the medians for normal children, *viz.*: Seguin, 15%; cubes, 12%; Healy I, 12%; mare and foal, 22%; Healy A, 22%. The time and point scores for these performance tests are in no way symmetrically distributed, nor do the frequency curves conform to any one design. In the mare and foal test the curve shows a very steep beginning with a long tapering upper end. In the Knox cubes it came nearest to the bell-shaped form. The Healy A was double-moded. The Seguin showed double plateaux, and the Healy I curve was of a marked long-ranged plateau structure. On the whole, as we have indicated, these groups of subnormals attain a much lower "mental age" valuation on practical tests than do normal children. But their "psycho-motor" achievement exceeds somewhat their "language level." In practice these types of performance tests are found very useful for the purpose of clinical examinations, especially of subnormal children,⁽⁴⁾ and it is an added advantage to be able to compare the attainment of individual subnormal children with the averages, and other measures of variability, obtained by their "peers" in mental ability.

There seems to be, then, a more unevenly graded distribution of abilities to perform practical tests than tests involving intricate language mechanisms. In performance tests we find numbers of individuals of subnormal mental levels who can attain results up to and even beyond the

average for individuals of normal intellectual development; though, of course, as would be expected, the average or mean results of the subnormal classes or levels as a whole are below those of the normal. There are also marked variations in the quantitative values of the individual results attained in performance tests, whereas in the Binet (particularly for subnormal intelligences of normal mental functioning) marked variations are not altogether characteristic; indeed, we tend to expect and obtain somewhat similar responses, both individually and on the whole, due most probably to retarded development in language mechanisms as well as all round defects in inner auditory and visual processes.

The characteristic differences are well brought out by means of graphs, representing the interlocking of intelligence quotients for each mental level, determined for both the Binet and the Porteus scales. In the Binet graph we find that the upper limit of the distribution curve of the feeble-minded I.Q.'s does not quite meet the lower limits of the curve of the normal I.Q.'s. The curve of borderlines interlock with those of the lower and higher levels. The same is true for cases of deferred diagnosis. On the same graph we notice three distinct peaks indicating the upmost reach of the feeble-minded, borderline and normal levels—the borderlines intermeshing the two adjoining levels. On the other hand, in the Porteus I.Q.'s graph, there are no outstanding peaks, for there is a marked intermeshing of all the lines of the curves of distribution for each mental level. The upper and lower limits of the ranges for each mental level certainly conform with the scale of their values, but the intermediate positions on a fairly extensive range (from 60 to 100) show a somewhat intricate interlacing of lines. And the total range of I.Q.'s for any mental level considerably widens as we descend from normal to feeble-minded levels.

We find, then, a more widely distributed, but unevenly graded range of abilities for performance tests on the part of subnormal intelligences as compared with normal. It is also of pedagogical importance to note this advance of subnormals in the handling of concrete problems; it indicates the reasonableness of the specialized curriculum now generally accepted in primary schools.

CORRELATIONS BETWEEN TESTS.

Comparisons of Correlations of Performance and Binet Tests.

Subjects.—In order that a series of intercorrelations between a number of tests might be determined, the first 210

individuals, whose records indicated their results for the Binet, Porteus, Healy I, Healy A, and mare and foal tests were selected. If the Sequin form board, Knox cube, etc., were included, the numbers would have been smaller. It happened that in every examination a variety of tests was given at different places, and under varied circumstances; and the question of statistical treatment did not arise at the time. The age distribution of these 210 children is: 10 years, 32; 11 years, 48; 12 years, 56; 13 years, 48; and 14 years, 26. They comprised 122 boys, classified as follows: 50 feeble-minded, 23 deferred diagnosis, and 49 borderline; and 88 girls classified as follows: 57 feeble-minded, 16 deferred diagnosis, and 15 borderline. The group is distinctly subnormal according to psychological criteria. Half their number are feeble-minded (especially high-grade) children of school age. They belong mainly to the special classes of the primary schools. It is probable that a sprinkling of them will not be certifiable on reaching the school-leaving age of sixteen years. (It might be pointed out that the legal definition of feeble-mindedness differentiates between feeble-mindedness at school age and at adulthood.) In this group there are also included 40 boys in residence at a training school in the country. The whole group is accordingly a selected one, comprising subnormal and other problem children who are ordinarily enrolled in special "ungraded" or "opportunity classes." Further, 30% of these 210 individuals have not been included in the similar age groups previously referred to.

Brain Capacity.—This group is below the average for normal Tasmanian children in brain growth according to the following table:

Year of Life.	BOYS.		GIRLS.	
	Average Capacity of Brain In c.cm.	Percentile for Normals.	Average Capacity of Brain. In c.cm.	Percentile for Normals.
11th	1273	40P	1206	30P
12th	1317	50P	1255	50P
13th	1295	40P	1242	30P
14th	1280	30P	1275	40P
15th	1316	30P	1256	30P

With the exception of the 11 year old children (12th year of life), the remainder vary from two to four years in retardation of brain growth. As compared with the percentile ranges for normals they are irregular in distribution.⁽⁵⁾

Of the boys 27% are below the 10 percentile, and 17% above the 90 percentile. That is, they show an abnormal development of brain capacity nearly two and a quarter times greater than normal children. The corresponding percentage for the girls are 24% and 6%.

Binet and Porteus Variations.

In the following table is given the mean mental ages (with standard deviations) as determined by the Binet and Porteus scales, for each chronological age. These means are about the same as the medians (see page 59) ascertained for 274 individuals of similar chronological ages, who include 70% of these 210 cases. Here also the Porteus mental ages show a much wider range than the Binet.⁽⁶⁾

		Mean Mental Age.		Standard Deviation.		
No.	Age. Years.	Binet.	Porteus.	Binet.	Porteus.	
32	10	7.0	7.5	0.75	1.67	
48	11	7.5	8.5	0.59	1.73	
56	12	7.9	9.0	0.79	1.95	
48	13	8.5	9.3	0.81	1.66	
26	14	9.5	10.4	0.89	2.01	
Total	210	Whole	8.04	8.97	1.07	1.95

(To be Continued.)

INTELLIGENCE TESTS OF BLIND SUBJECTS WITH THE MODIFIED BRIDGES POINT SCALE.

By W. E. BLACK, B.A.

INTRODUCTION.

It was suggested to the writer that the intelligence of a certain blind subject should be tested, in view of an estimate already found of his mental capacity. Haines's Monograph (Psych. Mon. XXI), "Mental Measurement of the Blind," was read and considered. The writer did not have access to the more recent work on this subject referred to by Pintner ("Intelligence Testing," p. 335). Since Haines gave a complete scale with age-medians of performance (though the work at that time rested on no great number of cases), the writer thought it would be of interest

(a) To test the available blind subjects by Haines's Scale.

(b) To correlate the ranking by these results with a teacher's intelligence ranking.

- (c) To measure the brain content of the subjects (see before, and Porteus's "Studies in Mental Deviations," p. 31), correlating ranking by brain content with the test ranking, and comparing the brain contents of these subjects with those of blind subjects given by Porteus.
- (d) To find whether the subjects revealed by the test as sub-normal were considered so by the staff of the Institute.

METHOD.

Since only 21 subjects (whose ages ranged from 7 to 17 years) were measured, all this work is only to be regarded as exploratory in nature.

It is impossible to give here a full description of the Scale and the procedure. The method of measuring brain content has already been referred to. For the Scale, the instructions, norms, etc., the reader is referred to the monograph cited. Suffice it to say that Haines's Scale is a modification of the Yerkes-Bridges Point Scale. Where the tests of the latter scale were adapted to the testing of blind subjects, they were included; where they did not appear suitable, they were replaced or modified. For instance, the choice of pictures in the Yerkes-Bridges Scale was replaced by the choice (by touch) of fabrics. The comparison of lines 5 and 6 mm. long (by sight) was replaced by the comparison (by touch), of rods 4 and 6 mm. long. In place of the reaction to three Binet pictures, a test involving the picking out from a box, and naming, of objects such as a doll, a shoe, a bootlace, a marble, a penny, etc. etc., was given. Other tests used were a form-board test, a size-weight illusion test, and the Knox lines given by tapping on the outermost finger-joints of the left hand, the palm being upturned, with a pencil, and requiring the subject to repeat the movements. In all, the Scale comprised 22 tests with a total possible score of 100 points. The final test was a dissected-sentences test. The words were presented written in braille. In the original, the Stanford revision sentences were used, but finding that some of the subjects had heard of these, the writer arbitrarily substituted for this test Dr. Phillips' five dissected-sentences (see Phillips, "Measurement of General Ability"), allowing the same total value for the test.

A difficulty arose since some of the subjects were only partially blind. The course that was followed (it seemed the only one in the circumstances) was to proceed with the testing just as if they were totally blind.

Haines advised for use as norms the age-medians he published for 78 totally blind, normal subjects. He chose, as a mental coefficient, the Coefficient of Mental Ability (C.M.A.) obtained by dividing a subject's score by the median score of the subjects of that age. He decided that a C.M.A. of 0.75 indicated mental deficiency. In the absence of other expedients, Haines's age-medians and method of comparison of the subjects were in the present case adopted. The chronological ages of the subjects were calculated to the nearest birthday.

The subjects were ranked in order of their intelligence by two of their teachers independently, the ranking by the senior teacher being regarded as the more authoritative. This ranking by the teachers was also independent of the test ranking.

RESULTS.

The extent of the correlation (found by the Spearman Rank Order method) between the test ranking and the senior teacher's ranking was 0.8. That between the two teachers' rankings was 0.75. The test ranking correlated with the brain content ranking 0.64.

In brain content only two out of the 20 subjects were superior to average. As far as comparison can be made, the blind subjects were not so deficient in brain content as the deaf subjects. On the whole, this would not seem to conflict with some information on the brain content of blind and of deaf subjects given by Porteus (see p. 37 and p. 59 and following of "Studies in Mental Deviations"). From some rough figures given on p. 62 of the same work, it appears that the present subjects were on the whole superior in brain content to the American blind subjects measured by Porteus.

Only two subjects were found with a C.M.A. below 0.75; these were 0.59 and 0.6 respectively. The staff concurred in the opinion that these two subjects were sub-normal. A subject whose C.M.A. was 0.76 was placed low in the ranking.

The general conclusion seems (agreeing with Pintner "Intelligence Testing," p. 334) that on the slight evidence here offered, the Haines Scale affords a fair provisional method of measuring the intelligence of blind subjects.

REVIEWS.

THE PHENOMENOLOGY OF ACTS OF CHOICE. By Honoria M. Wells. *British Journal of Psychology, Monog. Suppl. XI.* Cambridge University Press. 1927. Price: 10s. net.

AN EXPERIMENTAL STUDY OF THE MENTAL PROCESSES INVOLVED IN JUDGMENT. By B. P. Stevanovic. *British Journal Psychology, Monog. Suppl. XII.* Cambridge University Press. 1927. Price: 10s. net.

The former of these two pieces of research directly refers to the problem of voluntary choice. Original work along this line was first carried out by Michotte and Pruem at Louvain. Pairs of numbers were exposed to the subject who might in certain cases choose between adding or subtracting or, on the other hand, between multiplying or dividing them. In the same year, 1910, Ach's work on "will" was published. He set his subjects to learning pairs of nonsense syllables by the "treffer" or "paired associates" method. When learning was complete, Ach, in certain cases, varied the associated response by demanding a rhyme or a transposed syllable in place of the former. All these experimenters concurred in the finding of a "self-factor" in volition, which operated as a final moment in the act of decision.

In 1911, also at Louvain, Barrett substituted other material for the numbers of Michotte and Pruem, *viz.*, potable liquids which the subjects were required to drink. The tastes of these were first completely learned by colour association, and then the process of choosing between each of the pairs in turn was begun. Barrett found neural paths were more important than the "self-factor" in coming to a decision. Wheeler took up the problem again in 1920, using pictures and musical records as material for his subjects to choose from. He concluded that the "self-factor" was a psychological artefact and the act of choice might be reduced to kinaesthetic and sensation images. Martin again investigated the problem in 1921. The materials used were (a) imagined situations and (b) coloured liquids of distinctive odours, the odours not being previously learned as in Barrett's experiment. In certain cases of decision, subjects were got to make the attempt to reverse their former decisions. This investigation confirmed the findings of the earlier investigators as opposed to Wheeler's results.

The present work by Dr. Wells follows Barrett's method, using distinctive nonsense names for the potable liquids. In addition to

chronoscope records, the subjects' resistances to the psycho-galvanic current during and after choice were also recorded. The experimenter's findings support that of the majority of investigators in regard to the presence of a distinct "self factor" operating in decision. The types of decisions arrived at also confirm Michotte and Pruem's work, also that of Martin, with minor disagreements of classification. The results of the psycho-galvanic reflex are interesting and tend to support Aveling's contention, *viz.*, that changes of resistance are not due to emotions. One experimental result that may be regarded as entirely novel, and which is passed over with no comment by the investigator is to the effect that emotions were not retrospectively recorded as occurring during the act of choice, but afterwards. Further direct investigation on this point, along such lines, might throw some light upon the validity of the James-Lange theory.

Dr. Stevanovic's work follows the process of concept formation upon previous lines, using in addition the technique of the psycho-galvanic reflex. Aveling in 1912 used cards of similar objects, each card being designated by means of a nonsense syllable. The process of association of name and object was followed by an effort to "conceptualise." In 1912-13, Miss Fisher used a similar method, substituting for Aveling's objects a series of biological specimens from "a zoo that might have been." Stevanovic follows in many ways along the latter's improvement upon Aveling's method. Stevanovic obtained his series of sets of figures by outlining different shadows from an irregular piece of paper for each group. He found that the process of forming concepts follows upon the lines set forth in Spearman's recent description of intelligence as an "eduction of relations."

Imageless thought appears as the final method of conceptualising the judgments. Aveling's method of evoking introspections has been reintroduced, the subject being required to complete a sentence such as "The fourth Sabom is . . ." and to introspect upon the completion process. Such a method would appear to be applicable to, and generally useful in, many types of laboratory work, and might well be used more extensively by other investigators. The results of the findings obtained from psycho-galvanic reactions tend to corroborate the results obtained in the previous work by Wells.

Both investigations were presented as subjects for Ph.D. theses in King's College, University of London, and the work was carried out under the guidance of Dr. Aveling. They are both of the usual high character associated with that institution. Both investigators tend to depart from the classical American method of introducing the study by means of a history of previous investigators. Such a procedure serves many useful purposes and prevents the researcher overlooking other fairly important and allied pieces of work; in both of the present reports there are obvious omissions of this nature. In the case of the second investigation another essential, a bibliographical reference list, is lacking.

A. H. MARTIN.

PRIMITIVE MAN: HIS ESSENTIAL QUEST. By John Murphy, D.Litt., with a Foreword by R. R. Marett, M.A., D.Sc. Pp. xiv + 341. London. Oxford University Press. 1927. Price: 15s. net.

"The last word about culture," says Dr. Marett in his foreword to this book, "must always lie with the psychologist." The book itself is an approach to the problem of cultural anthropology from the psychological point of view. At the moment the question of the relation of psychology and ethnology is one concerning which there is much dispute and much misunderstanding, and this soon becomes obvious.

Dr. Murphy takes issues at once with the views represented by Elliot Smith, Perry and Rivers, and contrasts, in his own terms, their transmission theory with the psychological theory of primitive mind. Elliot Smith has argued that there is in man in general no natural impulse to be progressive and, in regard to the constituent elements of civilization, there is no natural impulse in man to invent such customs or ability to do so in one generation. The individual is to a very great extent dependent on the community for the content of his mind and for his culture, just as many communities have derived from an originating community such arts of civilization as they possess. In rejecting this position, Dr. Murphy adopts what may be termed a revised version of Tylor's doctrine of "psychic unity." "In exact opposition to Professor Elliot Smith we should maintain that there is in man just such a natural impulse as he denies. It is an impulse which it is one of the main purposes of this essay to investigate, a tendency which is in the nature of mind and is operative in all races. The impulse is towards unification; it is the tendency to unify both his thought and his practical life, which we shall later consider more fully under the title of 'Man's Quest for Unity'." Dr. Murphy takes this quest for unity as his main interpretative principle in his examination of the thought and practice of primitive man. Man acquires culture, on his argument, because his mind has a craving for wholeness. This quest for unity is also regarded as the one feature common to all thought from its lowest to its highest forms and it finally becomes much more than a fundamental psychological principle, for Dr. Murphy claims that the supreme answer to this quest of the human mind is to be found in a theistic and Christian philosophy. "The mind of man carries on the undeviating tendency of nature in a quest for unity now become conscious and expressing itself in all the activities of his theoretical and practical life. From the simplest perception to the scientific theory of Einstein, from the humblest concept, such as "greenness" or "sunshine," to the most complete system of philosophy, from the vaguest taboo to the categorical imperative, and from the simplest prayer to the most deeply realized communion with God, man is in search of and progressively attaining mental, moral and spiritual unifications with his own soul. It is our Christian philosophy to regard the highest possible unification within a man, the most finely and richly woven texture of his personality, as capable of being secured by a Kingdom of Heaven within him, that is the ordering and harmonizing of all the elements of his inner life by the Christ-ideal or the Spirit of Christ."

This principle of unification in man has led him, Dr. Murphy argues, to make a series of integrations, and his progress towards civilization and in it has proceeded by way of such integrations, linked together by successive differentiations. There was first the integration of instinct, animal-like, unreflective and stable. This is contrasted with the integration of intelligence which is said to characterize civilized man. Intermediate between these two is the integration of custom. The mind of man at this stage is emerging from the sway of instinct and is attempting the higher unifications of reflection. But in what Dr. Murphy calls his generalized brain, with its undeveloped frontal, co-ordinative areas, primitive man possesses an imperfect instrument for thought. The integration of custom, with imperfect intelligence playing upon or working with the instincts as its material, gives again on a higher plane the lost stability of the integration of Instinct. It is with man at this stage of his evolution, the stage, it is said, at which most savage peoples are found at the present day, that the author is particularly concerned.

Dr. Murphy combats the theory of Levy-Bruhl that primitive mentality is of a different type possessing prelogical and mystical

characteristics peculiar to it. He regards the primitive mind as in the line of a direct evolution towards the modern mind and regards its aberrations as due to the imperfect development of the higher brain centres and of intelligence. The important customs and beliefs constituting Totemism and Exogamy are viewed as arising out of primitive reflection upon instinct, upon the food instinct and sex instinct respectively. The nature of concepts and the formation of primitive concepts is discussed and here Dr. Murphy disagrees with the group theories of Durkheim and others and emphasizes the activities of the individual mind. He attempts an account of the psychological processes by which the primitive mind arrives at the generalized notion of Mana, which is regarded as the beginning of religion. From it develop, in Dr. Murphy's scheme, the concepts of Animism and of the life after death. The reasoning of primitive man is described as semi-instinctive in nature, lacking in co-ordination and subject to fatigue or weariness of effort. Dr. Murphy discusses it at work in producing the beliefs and practices associated with taboo, magic and religion. The disintegration of custom and of the tribe takes place through the domestication of food, animals and plants and through the development of the co-ordinative mind. We then get the evolution of Polity and the development of the higher unifications of individuality, society and religion. In a final chapter it is argued that all the various unifications to which man's quest for unity leads him bring with them pleasure in the lower ranks of the series and happiness in the unifications of the moral and religious life.

One is inclined to regard this book more as a contribution to the philosophy of the Christian religion than as a contribution to science. Or rather, faced with the wealth of ethnological and psychological material in present-day science, one does not quite know how to regard it. The whole argument, however, seems abstract and schematic. From the scientific point of view there are many obvious criticisms to make regarding the selection and use of ethnological and psychological facts. To begin with there is the question of the relation of ethnology and psychology. The author misinterprets the point of view of Elliot Smith, Perry and Rivers when he contrasts it with a psychological point of view. (Dr. Marett does the same in his foreword when he writes: "If the so-called diffusionist school had its way no room would be left for the psychologist within the four corners of the subject.") The mere historical analysis and reconstruction of culture is admittedly inadequate, but equally inadequate, and much more barren, is its interpretation exclusively in terms of an unreal type of individual psychology. This is what the psychological theory of Dr. Murphy really amounts to. As against views of this kind Elliot Smith, Rivers and Perry have rightly emphasized the part which social processes and the forms of culture play in determining man's mental life. The later work of this school combines historical reconstruction with psychological analysis and interpretation, the psychological principles being drawn not from a psychology of the evolution of an unreal individual mind, but from social psychology. Dr. Murphy is too exclusively concerned with the evolution of the individual mind and brain and neglects the reactions of all the various forms of culture on human plasticity. He really revives in a new guise the doctrine of "psychic unity" and the "evolutionary" doctrine in ethnology, applying it in this case to the evolution of the mind itself.

So far as the work of Elliot Smith, Perry and Rivers is concerned, Dr. Murphy does not consider their contributions to the question of the origin of magic and religion. Their theories regarding "life-givers," symbolism, early ideas about death and immortality, and the

cult of the Great Mother are of great interest to the psychologist and bear an interesting relation to some of the theories of the psychoanalysts. Further, the extremely important principles of cultural degeneration and of borrowing are not given a place.

Regarding Dr. Murphy's use of psychological material much might be said. There is the question of mind and brain for example. In his account of the brain and mind of primitive and modern man Dr. Murphy appears to adopt an over-simplified theory of the localization of functions. The problem of localization, especially that of the higher mental processes in the so-called intellectual centres, is a very difficult one and beset with many fallacies, as Piéron in his recent "Thought and the Brain" shows. Again, on the question of the relation of instinct and intelligence, a position is adopted with which few modern psychologists could agree. Instinct and intelligence can no longer be regarded as successive stages in the evolution of mind. The psychologist now regards them as interdependent throughout animal and human activity and as separable only by an effort of abstraction.

Dr. Murphy's whole treatment of the human mind will strike the present-day psychologist as too intellectualistic. He certainly fails to appreciate the full significance of man's instinctive-emotional endowment and neglects the very great part which the sentiments, as configurations of the emotions formed by interaction with the social environment, play in human belief and conduct. He neglects, too, the important principle of rationalization, or the secondary justification of irrational beliefs and behaviour. This is a psychological conception which throws light on a very great deal of ethnological material. So far as his treatment of the cognitive functions of the mind is concerned, Dr. Murphy would probably have found material much better suited to his argument in the theories of the Gestalt school than in those which he adopts.

One is tempted to say in regard to this book that the author has selected and interpreted scientific facts in the interests of the personal synthesis to which his own quest for unity has led him. And perhaps this is because the quest is becoming an increasingly difficult one.

I. L. G. SUTHERLAND.

AN INTRODUCTION TO SOCIOLOGY. By Wilson D. Wallis. 1927. New York: Alfred A. Knoff. Price: \$3.50.

In the social sciences it is only too true that "of the making of books there is no end." Text-book after text-book issues from the press distinguished from its predecessor by the colour of its cover, the order of its topics or the degree of timidity of its author in dealing with the live issues of the day. The bane of sociological texts is that they fail to introduce the student to the problems of his own age in a way that will stimulate him to think and interest him in the social life of his people. Writers deal with the social phenomena of the past, but fight shy of coming to grips with the social problems of the present. How truly did the late Professor Bury write: "But if science seems pretty safe, it is always possible that in countries where the scientific spirit is held in honour, nevertheless, serious restrictions may be laid on speculations touching social, political or religious questions." J. A. Hobson, too, in his "Free Thought in the Social Sciences," indicates the obstacles to a free, scientific inquiry into modern social problems, when the investigator seeks truth and not popularity with conformity.

Professor Wallis is to be congratulated on writing a text-book that will bring the student face to face with modern problems and will encourage him to think freely about them. In an introduction to the science one does not look for original material; this book is noteworthy in three respects.

First, the plan of the work. The key to this is to be found in the author's statement in the preface: "The approach to sociology adopted in this book turns away from the usual paths, not because they are too well-trodden, but because they seldom lead to profitable adventures. The work is an attempt to come to grips with the realities of the social world." The author divides his work into six sections.

1. Social life in culture perspective, which brings out the nature of social relations illustrated by *résumés* of the social life in primitive societies and the civilizations of the Orient, of Greece and Rome and of Western Europe.

2. Social theory, in which the principles underlying these social organizations are briefly discussed.

3. External factors influencing social life, especially physical environment, race, heredity and economic forces.

4. Cultural and psychological factors influencing group life, which includes a treatment in outline of the psychology of the group with special reference to language and custom, tradition and opinion, nationalism, internationalism and war.

5. Phases and problems of modern society, dealing with the family, education, the press, politics and law, religion, industry, poverty, mental deficiency, delinquency, race problems, immigration and population.

6. The trend of social development, in which are discussed such problems as diffusion of culture traits, widening horizons, the drive and drag of social life, social reality and social idealism, literature and the prospect of Utopia, social progress.

Obviously with such a comprehensive programme the author cannot deal with details, but this is an advantage to the student whose vision of the wood is not shut off by the trees. Each chapter is followed by a very useful list of books by the reading of which the detail may be obtained.

Second, the author does not hedge on the problems of the day. The actual difficulties that the thinking student knows to exist in his own social environment are freely discussed and the modern problems that face society are fairly stated. The author is no partisan but he is not prepared to follow the path that custom has beaten. One or two short quotations will indicate his attitude:

"The World War was the outcome of conditions inherent in the nationalisms of Western civilization, and was the price the nations paid for their follies," page 225.

"The Christianity which took root among the common labourers of Palestine was despised by the well-to-do; to-day it is the religion of the prosperous. To understand the change we must turn to history. . . . During the last thousand years it (the Church) has controlled considerable property and has been interested in material possessions and in the support derived from them. In order to maintain itself in an industrial order in which property and money are the preconditions to existence and influence, the organized Church now depends mainly upon contributions from the propertied classes.

Thus its interests are to an extent identified with those of property, the wealth of the parishioners being the weal of the Church. The economic motive is let in by an open door, and some ministers have been known to preach one economic doctrine while practising another," page 253.

"Thus the newspaper is not far removed from the position of the lawyer who represents the interests of his client, but with the difference that the lawyer is frankly advocating the case of his client rather than passing judgment upon it. The attitude of the newspaper is that of passing judgment, whereas often it is merely advocating special interests," page 281.

Third, the book is written in clear and simple language and is produced in a pleasing form that is a credit to the publishers.

To teachers or students who are looking for an introductory textbook we can strongly recommend it.

T.A.H.

AN EXPERIMENT WITH TIME. By J. W. Dunne. 1927. London: A. and C. Black. Pp. 208. Price: 8s. 6d.

Mr. Dunne has had some remarkable dreams and he has written a remarkable book. It is, in fact, two books, one an exposition of a purely empirical character of his dreams and their alleged relation to events experienced later by him but future at the time of the dream, and the other an elaborate and far from sound exposition of serial times leading to the quagmire of an infinite regress of times.

In the first portion of the work he gives his dreams, of which he kept a careful record made immediately upon awakening. Experience forced him to the belief that while many portions of dreams are mere revivals of past events due to memory, other portions could not be so explained. He gives details of dreams several days in advance of the objective happening of the events pictured. In one case the interval was twenty years, but in general it was about three or four days. In every case they were dreams of the future experience of Mr. Dunne himself or of his future rather of the future. He claims that these dreams involve no "clairvoyance," but a perception by the dreaming mind of the future of the everyday waking mind. Mr. Dunne's dreams appear to have no association with desires or forebodings of fear. Roughly half the content is due to memory and half to the alleged perception of the future. We cannot gainsay Mr. Dunne's experience, although he asks us not to accept it as scientific evidence. It is a matter for further detailed and collective experiment. He induced a relative to co-operate in his investigations and he, having considerable interest in race horses, did take it up. We are not told that he "spotted" any winners by Mr. Dunne's system of experimental prophecy. Arresting as are some of the dreams, such as that of the Martinique eruption and of reading incorrectly a newspaper report, Mr. Dunne fails to be convincing in his day-dream reveries about the contents of unopened novels. However, a considerable amount of impartial evidence has been collected by psychic research in other places. One of the most remarkable of these cases was that of the Cornish miner who dreamed of the shooting of the Prime Minister Percival. This might have been due to clairvoyance like many of the Gaelic dreams and visions of the Highland women. The emphasis in Mr. Dunne's case is on the peculiar *time* of the dreams. They are the sort of dreams he would normally have after an event. They occur three or four days *before*.

Prophetic dreams have been heard of before. Osty and Flammarion have claimed to record real prophetic dreams like those of Mr. Dunne. Some dreams have appeared on examination to be mere coincidences and we never have statistics of those which do not come true.

If the results were, upon general investigation, accepted, philosophers would be faced by a perplexing problem handed to them by the psychologists.

If Mr. Dunne's point be established what, then, is the Future? Its precise status becomes a matter of practical interest. If the future can be seen even in a dream, then in *some* sense it must exist. There seems to be no escape from this as Mr. Dunne realizes. He attacks Bergson's theory of the future. He might equally well have attacked the view of Professor Broad, of Cambridge, who asserts that the future is pure nonentity, nothing at all.

Bergson's view, says Mr. Dunne, introduces the totally unnecessary hypothesis of adding to the past by a process of creation out of nothing. This he calls "a very strange proposition and one for which we have no evidence whatever." It is one of Bergson's beliefs that the portal of the Future stand wide open, and that the future is not ready-made. For Mr. Dunne, however, the whole course of events resembles a cinema film, which is being shown. The actual picture on the sheet is our present, but what is yet to come is already there in the film. He professes to be able to peep into the film ahead and see what is there before it is shown on the screen.

His work is parallel to a remarkable book published anonymously some years ago which dealt, not with the Future, but with the Past. This was written by two well-known English ladies who visited Versailles and wrote down carefully their amazing experience of dipping into the past, giving intimate details of events more than a century earlier, events which marked the last days of Queen Marie Antoinette at Versailles. Their book, "An Adventure," was widely discussed by psychologists at the time. Mr. Dunne's proposition is, however, more exciting. To see past events is after all only to see what has happened and while it is difficult, on any theory of mind, to account for this, it is another matter to see events that have not yet happened. Of course thinkers are never unanimous with regard to what constitutes acceptable evidence, but if Mr. Dunne's claims were substantiated as features of the dream mind, it would then follow that the future does in some sense exist. The events of the future would all be in the film, but not yet unrolled as present happenings. This of course is no new doctrine. Determinists have always asserted this and most theologians have no difficulty in claiming that to the Deity all events are equally present. The theologian then begins to face difficulties which do not trouble the materialistic determinist, who has thrown over belief not only in Deity but in free will. The theologian usually wishes to retain both and is faced with a terrible problem. If God knows the future, then its character is determined and our supposed free will is an imaginary vain thing. Certain subtle thinkers both philosophical and theological have, however, made this claim. There is no inconsistency they assert, for God's knowledge is merely the knowledge of what a free agent will do. But how can anyone, even the Deity, know what a free agent will do? If his action is known one has suspicions of its being free. Further, leaving theological considerations aside, if such knowledge comes to the agent himself, he (if he have genuine freedom) will falsify the knowledge. We would appeal to Mr. Dunne on this point. If he saw himself in a motor accident

a week hence, would he not avoid motors for twelve months at least? But, if he did this he would have to admit that what he saw in his dream was a false future, for he would by his action have falsified his own prophecies.

There is the further problem as yet unsolved, of the character of the events of the world as these appear in the time series. The point at issue may be put thus. Let us suppose the events or happenings of everyday life to be represented by horses on a race track following each other. The human mind is like the judge on the course stationed opposite a narrow line, the present moment. Do the horses move past that line? They appear to do so. But the same effect could be obtained by moving the judge's box past fixed horses. If the future events are all fixed, then it is as if we move past the horses, not the horses past us. This is not a conundrum, but a real difficulty which cannot be solved in the present stage of our knowledge. It may never be solved, but confusion at least could be avoided if we were more careful about our terms.

Dunne claims in his diagrams that the events of the world, future as well as past, move past us. This would, he considered, explain the "moving" present. He insists, as against Broad and others, that the future is there given and it moves towards us. The sense of the persistent present can, of course, be got by either,

- (1) the events moving past us,
- (2) our moving past the events.

From the standpoint of the experience of the present itself, either of these views may be true and the status of the Future cannot be determined without other considerations. The present is not merely our knowledge of events, it is objectively their actual happening. But Dunne would say that our mind in dreams may go past events which are future since they have not happened.

The moving present is the essential feature of Time. In fact Time is constituted by this moving present. We must admit, however, that we apply the term Time to the direction or dimension of this movement. If we did not admit this then Time would be merely the present, a limitation which is both invalid and absurd. But we need not and should not make further admissions of a specious kind, *e.g.*, it is argued (notably by Dunne) that this movement of the present takes Time and so there must be a second time in which such movement is timeable. But this is not valid. Time is only known by events. The moving present is not timeable, for there is no second system of events available. The present which is moving is the present of *all* events. Any second time is an imaginary absolute and such a supposition can only lead to the absurdities of an infinite regress of *Times*, a doctrine which vitiates Dunne's book.

He rejects the view that events come into being because of creative evolution. They are "there," he insists before they happen. He rejects the view that the future is nothing at all because it means we have to admit then some creative force which brings new events into being. This he regards as an unnecessary hypothesis. But in his doctrine of the future he lays down hypotheses which are much more difficult to accept.

The difficulty about the two times, which has led some thinkers into endless and fatal complication about an infinite series of times (*e.g.*, Dunne), arises from neglect to distinguish the two meanings of Time, Time as percept and Time as concept are not the same thing. The specific point to be noticed in this connection, however, is this: Time essentially implies a moving present and we fre-

quently mean only this by the term "time." Such time is perceptual in character. But we *also* use the term time to mean the whole range through which such a moving present has moved, is moving, and will move, *i.e.*, the totality of all events, past, present and future. This usage of the term has to do with the concept. "Time" is correctly applied to both. Obviously time cannot be merely the first kind of time, the *present*, but the demands of the case are perfectly well settled when we recognize our usage of the term for the whole range of events, through which the present moves (or which move through the present, the difference is irrelevant here). No question of an infinite regress arises, for the one time is perceptual, the other conceptual, and we use the term now for one, now for the other and also to mean both. It does mean both, the moving present and the entire range of that present in the past and future. But failure to recognize the difference has led to many absurd and fanciful statements about Time, infinite regresses based on infinite confusions. Mr. Dunne confuses "lines" and "times" repeatedly.

Time is certainly not the mere present and involves past and future. The past is what has happened, the present what is happening now and the future is what will happen or become present. No event is really present unless it is happening, and no event is a genuine future event unless it is definitely going to happen some time. Hence something foreseen which may be and is avoided is not the future for it never happens, and is therefore never an event at all. The most that could be said of it is that it is what would have happened had we not interfered. But that, whatever it is, is not the future. A Roman augur prophesied the name of the successor of an Emperor. This "Prophecy" led to the Emperor cutting off the head of the person named next day. His brilliant future never became a fact. It was only a possibility. Dunne himself appears to struggle with this difficulty, but does not face it frankly.

Whether the dream mind can see the future is a very dubious point, and we wish Mr. Dunne had stuck merely to his dream evidence. It is absurd to erect theories on it until more light is thrown on the question by further experiment and evidence. Mr. Dunne is certainly a new kind of prophet and as such naturally stimulates some kind of interest, but we do not yet know, although we may have strong suspicions, whether he is a false prophet.

The book contains no list of chapters and titles to the chapters, and no index. It is, however, calculated to stimulate further investigation into the baffling problem of Time, and because it does this it must be regarded as a most important book.

J. ALEXANDER GUNN.

AN OUTLINE OF STELLAR ASTRONOMY. By Peter Doig. 1927. London: The Draughtsman. Price: 7s. 6d.

This book was badly needed, and will be heartily welcomed by students of Astrophysics. Research in this subject is almost feverishly active, and discovery follows discovery so rapidly as to leave us gasping with delight and anticipation.

Accounts of these discoveries appear almost weekly in scientific magazines all over the world, and it is almost impossible for the average reader to sift this mass of literature and select that which really matters. This is the work of a specialist, and it has been undertaken with considerable success by Peter Doig.

"An Outline of Stellar Astronomy" is not an ordinary popular work. It is a summary of the most important published facts and theories of modern astrophysics up to about the middle of 1927.

The author himself states that the "book is meant for readers with slightly more equipment than that necessary for perusal of 'popular' astronomical literature."

Granted that equipment, which is possessed by a large and increasing number of people, the book is not only suggestive, but extremely readable. It consists of three parts. The first is principally a collection of facts and tabular statements—very valuable, but not to be taken in large doses. The general reader is advised to commence at Part II, referring back to Part I when necessary. Part II deals with the nature of a star, our knowledge of which has recently been enhanced by the most daring flights ever undertaken by mathematicians. Two of these, Eddington and Jeans, stand prominently forward. Where their theories differ the author appears to favour Eddington. We are introduced to a nightmare clash of atoms, torn to shreds and denuded of the electronic clothing to which we are accustomed. We find that solid matter is extremely rare in the Universe, and that we happen to live in one of the very few cold spots where its existence is possible.

Our views of stellar evolution, considered to be in the main fixed only a year ago, are now found to require considerable modification.

The careful reading of a book like this marks an epoch in a man's mind. It places the petty everyday affairs, which sometimes loom so large, in their true perspective, and turns our thoughts to the realities of our fuller life, our place in the Universe, and the object of its Creation.

W. E. COOKE.

METHODS WITH ADOLESCENTS. By Ralph W. Pringle, Principal of the University High School, Illinois State Normal University. 1927. D. C. Heath & Co. Price: 7s. 6d. Our copy from George G. Harrap & Co., London.

This book is really a book of methods of teaching secondary school subjects; but it is not merely a collection of methods. The author relates all the teaching to the needs of the adolescent individuality. This has been frequently done before in connection with "the humanities," but not so systematically in connection with mathematics and science. In the teaching of algebra, for instance, equations, formulæ and graphs are very refreshingly dealt with as modes of expression meeting the needs of adolescents. This particular chapter has the backing of thirteen years' experience in supervising student teaching. Some other portions of the book are less effective, for quotation is too liberal. There is too much of "as Stanley Hall remarks," "as Dr. Thorndike states," etc.

It is interesting to be informed that 30% of the pupils in the Senior High Schools of the U.S.A. are enrolled in Latin, that Latin attracts more pupils than all the other foreign languages combined, and that over 70% of the 20,500 secondary schools in that country have classes in Latin, which are taught by 22,500 teachers.

This book should prove useful to secondary school teachers, if only from its emphasis on the growing life rather than on the subject of study. In addition, there is a large body of sound advice on everyday problems of the classroom.

R.L.

JOURNALS RECEIVED.

THE JOURNAL OF PHILOSOPHY. Edited by Professors Woodbridge, Bush and Schneider, Columbia University. Published fortnightly. Four dollars a year.

Vol. XXIV, No. 21, October 13, 1927. Mr. Dawes Hicks's Theory of Perception: George Boas. The Data of Consciousness as Essences: Durant Drake. Biological or Psychological?: Mary Whiton Calkins. No. 22, October 27. Wholes and Prehensive Unities for Physics and Philosophy: Lewis E. Akeley. No. 23, November 10. Dr. Schiller and Analysis: Dickinson S. Miller. The Doctrine of "Illusion" and "Error" in Scheler's Phenomenology: Paul Arthur Schlipp. No. 24, November 24. Personal Agency and the Human Analysis: Denison Maurice Allan. Mr. Drake on Essences and Data: George Boas.

PSYCHE. Edited by C. K. Ogden. Kegan Paul, Trench, Trubner & Co., London. Published Quarterly. Price: 5s.

No. 30, October, 1927. The Orthological Institute; A Miniature a Month: Editorial. Primary Colours and Primary Emotions: William M. Marston. Reading, Writing and Guessing: Robert Saudek. Consciousness, Chronaxy and Nerve Fibre Radiation: Oliver L. Reiser. Spinoza and Experimental Science: Richard McKeon. The Meaning of the Comic: Richmond H. Hellyar. The Antilogism: Christine Ladd-Franklin.

JOURNAL OF PHILOSOPHICAL STUDIES. Edited by S. E. Hooper. Published Quarterly for the British Institute of Phil. Studies by Macmillan & Co., London. Price: 3s. 6d.

Vol. II, No. 8, October, 1927. Present Tendencies in Speculative Philosophy: Professor J. S. Mackenzie. A Functional Theory of Knowledge (II): Professor Hugh A. Reyburn. Life and Matter: Sir Oliver Lodge, F.R.S. The Limits of Evolution: Professor N. Lossky. The Goodness of God: Leon Roth, D.Phil. The Possibility of Man's Freedom: Michael Kaye, M.A. Government by the People: John Macmurray, M.A.

THE ECONOMIC RECORD. Journal of the Economic Society of Australia and New Zealand. Melbourne University Press. Price: 5s.

Vol. III, No. 5, November, 1927. The Australian Public Debt: E. C. Dyason. Australian Productive Efficiency: C. H. Wickens. The National Dividend—A Symposium: L. F. Giblin, F. C. Benham and J. T. Sutcliffe. Australian Credit as Viewed from London: Sir Hal Colebatch. New Zealand and Asiatic Immigration: T. D. H. Hall. The Australian Tariff and the Standard of Living—A Re-statement: F. C. Benham. Comment on Mr. Benham's Re-statement: J. B. Brigden. Australian Business Finance: F. V. McGee. The Mechanism of International Capital Transfer under the Gold Standard: M. Palyi.

THE INTERNATIONAL JOURNAL OF PSYCHO-ANALYSIS. Official Organ of the International Psycho-Analytical Association. Baillière, Tindall & Cox, London. 30s. per annum.

Vol. VIII, Part 4, October, 1927. The Early Development of Female Sexuality: Ernest Jones. Scotomization in Schizophrenia: Rene

Laforegue. The Mobilizing of the Sense of Guilt: Robert Hans Jokl. Lectures on Technique in Psycho-Analysis (continued): Edward Glover. Shorter Communications.

MENTAL HYGIENE. Published Quarterly by the National Committee for Mental Hygiene: 372-374 Broadway, Albany, N.Y. Three dollars a year.

Vol. XI, No. 3, July, 1927. How Case-Work Training May be Adapted to Meet the Worker's Personal Problems: Grace F. Marcus. The Evaluation of Homes in Preparation for Child Placements: Charlotte Towie. Mental Hygiene—An Attempt at a Definition: Frankwood E. Williams. Experiences of a Mental Hygienist in a University: Harry N. Kerns. Factors in the Development of Psychoses in College Men: Harold F. Corson. Adaptation Difficulties in College Students: Karl A. Menninger. The Problem of Mental Hygiene Courses for the College Student: Milton A. Harrington. Results of Five Years' Psychiatric Work in New York City High Schools: Elizabeth Greene. School Maladjustment and Behaviour: Eleanor Hope Johnson. Self-Evaluation—A Problem in Personal Development: Floyd H. Allport. Adaptation and Growth: William Malamud.

ARCHIVIO GENERALE DI NEUROLOGIA, PSICHIATRIA E PSICOANALISI. Edited by M. Levi-Bianchini. Official Organ of the Italian Psycho-Analytic Society. Annual subscription outside Italy, 6 dollars. Teramo, Italy.

Vol. VIII, No. 3, September, 1927. Alcune Idee Psicologiche E Psicoanalitiche Sui Climaterii Dell'Uomo: Prof. M. Levi-Bianchini. Atti Ufficiali Della Societa Psicoanalitica Italiana: Prof. M. Levi-Bianchini. Bibliografie.

PHILOSOPHISCHER WELTANZEIGER. Edited by Paul Feldkeller Schönwalde (Niederbarnim) bei Berlin. Price: 40 Pfg., or yearly (6 numbers), Mk. 2.00

Vol. 1926/27, No. 5. Indische Logik: Dr. Betty Heimann. Annual Joint Session of the Aristotelian Society and the Mind Association: A. H. Hannay: Die Philosophie in Japan: Professor H. Minami. Philosophen der Praxis: Paul Feldkeller. Die Philosophie der Völker im Spiegel ihrer Zeitschriften (continued)—The United States of North America: The Editor. Weltkonferenz für Erneuerung der Erziehung in Locarno: Dr. W. Friedrich. Book Reviews and General News, also portraits of W. Vaihinger, Hans Driesch and Wildon Carr.

THE MORPETH REVIEW, A Review of Life and Work. Published by S. John's College, Morpeth, New South Wales. Edited by E. H. Burgmann, M.A. Price: 2s. a copy or 7s. 6d. a year.

No. 2, Christmas, 1927. Leadership: The Editor. The Future of the Hunter River Valley: F. R. E. Mauldon. Gambling: J. Norman. An Imperial Nerve Centre: W. Ashley-Brown. "Bal Masque": A. W. D'Ombra. Canberra: The Bishop of Goulburn. "The Stone": Bishop Gilbert White. Country University Colleges: F. A. Bland. Children's Books: Juliet M. Lyon. "Virgo Beatissima": The Bishop of Armidale. Giants: A. W. D'Ombra. "The Mirage": R. L. Wormald.

Since our announcement in the December issue of the first number of this review, the title has been somewhat changed. The Morpeth Review is a strikingly interesting and vital publication. It is a most readable journal, instinct with vitality and good tone. The Editor aims at articles which are informative without being technical, and in

this aim he seems to be succeeding admirably. He is able to draw upon many various contributors, clergy, economists, doctors, poets, with the result that a charming catholicity is one of the features of the Review. Printed on the Review's own press, there is something about the face of the type which imparts to it almost the intimacy of handwriting. We should like to recommend this publication to our readers.

WELFARE WORK. The Journal of the Institute of Industrial Welfare Workers, 29 Gordon Square, London, W.C.1. Price: 5s. per annum.

THE MEDICAL JOURNAL OF AUSTRALIA. Sydney. Published weekly. Price 1s.

This journal frequently contains articles of great interest to our readers who should be interested in psychiatry or psychological medicine.

BOOKS RECEIVED.

ESSAYS OF YESTERDAY. Selected by H. A. Treble, M.A., and G. H. Vallins, B.A., English Masters, Selhurst Grammar School. Harrap's Modern English Series. London: George G. Harrap & Co. Price: 2s. 6d.

A careful selection from Montaigne, Bacon, Cowley, Sir Thomas Browne, Sir Thomas Overbury, John Earle, Edward Hyde, Dryden, Addison, Steele, Samuel Johnson, Goldsmith, Lamb, Hazlitt, Leigh Hunt, De Quincey, Dickens, Thackeray, Alexander Smith and R. L. Stevenson. A well written introduction says that "there is in this book of yesterday's essays the intimacy of men famous in three centuries."

COMPOSITION THROUGH STORY-WRITING. Robert T. Lewis, B.A. London: George G. Harrap & Co. Price: 3s. 6d.

This book is called "A Book for Adventurers." It represents the result of experience in the effort to secure in pupils the capacity to write good English and to construct stories. The method commends itself to us, and the book is recommended to teachers of English and to all those who believe that the first requirement of an educated person is mastery of his mother tongue as a means of self-expression.

THE SECOND PART OF HENRY THE FOURTH. Edited by G. B. Harrison, M.A., and F. H. Pritchard. The New Readers' Shakespeare. London: George G. Harrap & Co. Price: 1s.

NOTES AND NEWS.

The following is a list of the papers read before the Melbourne University Philosophical Society during the year 1927. Friday, May 6th.—"Renouvier and the Philosophy of Kant": Professor J. Alexander Gunn. Friday, May 20th.—"Some Impressions of American Psychology": Dr. K. S. Cunningham. Tuesday, June 7th.—"Plato's Doctrine of Participation": Mr. W. A. Merrylees. Friday, July 22nd.—"What is Wrong with McDougall's Psychology?": Mr. W. M. Ball. Friday, September 2nd.—"Mysticism—A Symposium": Messrs. C. C. Dawson, G. A. Atkins, N. E. Porter. Friday, October 7th.—"The

Relations of Philosophy and Economics": Mr. R. Bronner. Friday, October 21st.—"Anatole France": Prof. J. Alexander Gunn.

The Office-bearers of the Society for 1927 were: President: Professor Boyce Gibson. Vice-Presidents: Mr. George Anderson and Mr. W. Merrylees. General Secretary-Treasurer: Professor J. A. Gunn. Assistant Secretary-Treasurers: M. Brosnan and Mr. G. A. Atkins. Committee: Rev. W. Ryan, Miss Olga Parker, Miss E. M. Jones and Mr. N. E. Porter. Auditor: Rev. Dr. Atkinson.

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At Wellington, New Zealand, the Psychologists of Victoria University College are working in conjunction with the School Health Department and the Child Welfare Department to establish a Psychological Clinic which it is expected will function this year.

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After five years of devoted and capable service, Dr. A. H. Martin has relinquished the office of Business Secretary of the Association. The thanks of members are due to Dr. Martin for the untiring energy which he brought to the discharge of his duties as Secretary. Professor John Anderson, of Sydney, succeeds Dr. Martin.

NINTH INTERNATIONAL CONGRESS OF PSYCHOLOGY.

The Ninth International Congress of Psychology will be held at Yale University in New Haven, Connecticut, U.S.A., probably in August or September, 1929.

The officers of the Congress are as follows: President, J. McKeen Cattell, of New York; Vice-President, James R. Angell, of Yale University; Secretary, Edwin G. Boring, of Harvard University; Treasurer, R. S. Woodworth, of Columbia University; Foreign Secretary, Herbert S. Langfeld, of Princeton University; Executive Secretary, Walter S. Hunter, of Clark University; Chairman of the Programme Committee, Raymond Dodge, of Yale University; Chairman of the Committee of Arrangements, R. P. Angier, of Yale University.

Besides these men the National Committee includes J. E. Anderson, University of Minnesota; Madison Bentley, University of Illinois; E. A. Bott, University of Toronto; H. A. Carr, University of Chicago; Knight Dunlap, Johns Hopkins University; S. W. Fernberger, University of Pennsylvania; William McDougall, Duke University; W. B. Pillsbury, University of Michigan; C. E. Seashore, University of Iowa; L. M. Torman, Stanford University; E. L. Thorndike, Columbia University; H. C. Warren, Princeton University; M. F. Washburn, Vassar College; R. M. Yerkes, Yale University.

This is the first meeting of the Congress in America. The previous meetings have been as follows: Paris, 1889; London, 1892; Munich, 1896; Paris, 1900; Rome, 1905; Geneva, 1909; Oxford, 1923; Groningen, 1926. It is expected that the Congress in the United States will be truly international in character. The Americans hope that the appointment of some foreigners for lecturers and lectureships can be arranged near the time of the Congress, so that foreign attendance can be increased and international solidarity within psychology furthered still more. Most appointments of this kind at American universities would have to apply only to psychologists who speak English.